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PERSONAL.

Mr. Thomas F. McGilvary has been appointed City Engineer of Duluth, Minn.

Mr. J. G. Voss has been elected Superintendent of the water-works and electric light plant of Newberry, S. C.

Mr. C. G. Titsworth, of Denver, Colo., has been appointed Assistant Superintendent of the Anaconda mine at Butte, Mont.

Mr. C. E. Widener has been elected City Engineer of Cumberland, Md., to succeed Mr. James Shriver.

Mr. Frank J. Hubbard, civil engineer, of Plainfield, N. J., was married June 9, to Miss Bessie Evelyn Titsworth, of that city.

Mr. J. F. Witmer, civil and hydraulic engineer, of Buffalo, N. Y., has removed his office from 65 and 66 Chapin Block to 705 and 707 Ellicott Square.

Mr. Henry N. Ogden, City Engineer, of Ithaca, N. Y., will visit England this summer and while there will inspect the various sewage disposal plants.

Mr. George Y. Wisner, M. Am. Soc. C. E., has resigned the office of Sanitary Engineer of the Board of Health of Detroit, Mich., which he has held for some years.

Mr. C. Millard, formerly Chief Engineer of the St. Louis, Chicago & St. Paul R. R., has been appointed Superintendent, with headquarters at Springfield, Ill.

Mr. Frank Cooper, civil engineer, of Philadelphia, Pa., has been elected City Engineer of Fairmont, W. Va., and has opened an office at No. 12 Hall Building.

Mr. John C. Quade has been appointed City Engineer of Kewanee, Ill. He has just finished the construction of a cement bicycle track for the Racine Athletic Association, at Racine, Wis.

Mr. James E. Moyer, Superintendent of the blast furnace of the Youngstown Steel Co., Youngstown, Pa., has resigned to become Superintendent of Hannah Furnace of the Mahoning Valley Iron Co., Mahoningtown, Pa.

Mr. George Hornung, M. Am. Soc. M. E., has been appointed Superintendent of the Newport (Ky.) water-works, to succeed Mr. John Surran. Mr. Elmer Kirker has been elected Secretary, to succeed Mr. J. M. Betz.

Capt. John M. Carson, Jr., Assistant Quartermaster, U. S. Army, will be relieved from duty in the office of the Quartermaster General and will assume charge of the construction of public buildings at Fort Hamilton, New York Harbor.

Prof. Frank H. Constant, formerly with the King Bridge Co., in the designing and estimating department, has been made Professor of Structural Engineering in the University of Minnesota. He is a graduate of the University of Cincinnati.

Mr. I. H. Burgoon, Superintendent and General Manager of the Ohio Southern R. R., with headquarters at Springfield, O., has resigned. Mr. N. E. Matthews, Receiver, has been appointed to succeed him, with headquarters at Lima, O.

Assistant Naval Constructor R. P. Hobson, U. S. Navy, has been detached from duty at Newport News, Va., and assigned to the United States Naval Academy, Annapolis, Md., as head of the New Department of Naval Architecture of that school.

Mr. J. E. Schwitzer, M. Am. Soc. C. E., formerly on the engineering staff of the Ottawa, Arnprior & Parry Sound Ry., with offices in Ottawa, Ont., has opened an office in the Drewry Block, Second St., Rat Portage, Ont., as an engineer and land surveyor.

Mr. R. Walter Creuzbaur, Assoc. M. Am. Soc. C. E., has recently been appointed Assistant Engineer in charge of the Water Purveyor's Bureau of the Department of Public Works of New York city. The office of the bureau is in the American Tract Society Building, 150 Nassau St.

Mr. Donald W. Campbell, civil engineer, has been appointed Chief Engineer of the Board of Public Works of Denver, Colo.; Mr. William T. Davoren has been appointed Commissioner of Highways and Mr. William H. Taylor, Secretary of the Board.

Mr. Joseph E. Schwab, Assistant General Superintendent of the Thirty-third St., Pittsburg, mills of the Carnegie Steel Co., Ltd., has been appointed to a similar position in the Duquesne Works, and will have entire charge during the absence in Europe this summer of Mr. H. B. Miller, General Superintendent.

Prof. Thomas Egleston, M. Am. Soc. C. E. and the practical founder of the School of Mines of Columbia College and since 1864 Professor of Mineralogy and Metallurgy in that school, has retired from active service in that connection, his resignation taking effect on July 1. He will be succeeded by Prof. H. M. Howe, of Boston, as Professor of Metallurgy.

Major Charles E. L. B. Davis, Corp. of Engineers, U. S. A., has been detailed to relieve Capt. Cassius E. Gillette of the duties now in his charge July 7, and perform them in addition to his present duties. Capt. Gillette will relieve Capt. Oberlin M. Carter, whose appointment as the military attache of the American Embassy at London was announced in our issue of June 3.

Mr. George R. Roberts, of Stephen; Mr. William R. Hoag, of Minneapolis, and Mr. E. D. Childs, of Crookston, have been appointed members for three years of the Minnesota State Board of Drainage Commissioners, to supervise the repairs and maintenance of the drainage ditches already constructed for the benefit of farming lands in the Red River valley. Mr. Hoag is Professor of Civil Engineering in the University of Minnesota.

Mr. John G. A. Leishman, until last March President of the Carnegie Steel Co., Ltd., of Pittsburg, Pa., has been appointed Minister to Switzerland by President McKinley. He was born in Allegheny, Pa., and entered the Shoenberger Steel Co. at an early age, rising to Purchasing Agent. In 1886 he became connected with the Carnegie interests and was a member of the board of managers from January, '88, to June, '92. On January 1 of last year he was elected President of the company.

Mr. Edmund B. Weston, M. Am. Soc. C. E. and M. Inst. C. E., has opened an office as a consulting engineer in Providence, R. I. Mr. Weston, for the last 19 years, has held the position of Assistant City Engineer in charge of the Water Department of Providence, R. I., and has made a special study of water filtration and sewerage and sewage disposal. He has twice visited Europe for the investigation of these subjects there, and he conducted the experiments for the city of Providence in 1893-94; the report upon which was published by the State Board of Health of Rhode Island. He has contributed a number of papers upon water purification and kindred subjects to the American Society of Civil Engineers and to the technical press, and he has already done considerable work as a consulting engineer in various parts of the United States and Canada.

OBITUARY.

Mr. James S. Harvey, contractor, of Milwaukee, Wis., died June 7.

Mr. Oliver H. Green, formerly a water commissioner of Sharon, N. Y., died June 4, aged 52.

Mr. George R. Youngs, civil engineer and surveyor, of Penn Yan, N. Y., died June 8, aged 65.

Mr. A. W. Morgan, civil and mining engineer, in charge of the mines at Minonk, Ill., was killed in an accident on June 8.

Mr. John L. Terry, for 20 years a member of the firm of Smith & Terry, ship-builders, of Greenport, Long Island, N. Y., died June 10.

Col. Frank Huger, Superintendent of Transportation of the Norfolk & Western Ry., with headquarters in Roanoke, Va., died June 11, aged 60.

Mr. Charles S. Kiddes, civil engineer, of Manchester, N. H., died last week, aged 69. He was at one time an engineer on the Boston & Lowell R. R. and later was City Engineer of Nashua, N. H.

Mr. Egbert T. Sees, Treasurer of the National Railway Publishing Co., 24 Park Place, New York city, died June 13, aged 67. He was born in Harrisburg, Pa., and entered the publishing business in 1861.

Mr. George H. Sellers, civil engineer and inventor, of Wilmington, Del., who was reported last week to have been badly injured by the explosion of a gas tank in Philadelphia, Pa., recently, while making some experiments, died June 7, aged 65. For a number of years he was General Manager of the Edge Moor Iron Works.

Mr. Alvan Graham Clark, the head of the famous firm of telescope makers, Alvan Clark & Sons, of Cambridgeport, Mass., died at that place on June 9. Mr. Clark was the son of Alvan Clark, the founder of the firm, and was born in Fall River, Mass., on July 10, 1832. After a grammar school education he associated himself with his father and brother, George B. Clark, in the manufacture of telescopes. The elder Clark, who died Aug. 19, 1887, was a portrait painter, but was induced to make some experiments in lens-grinding by his son's attempt at making a telescope. This firm made the telescopes for the famous Lick Observatory, and the late Alvan Graham Clark made the 26-in. lens for the Naval Observatory at Washington, and the 30-in. refractor for the Imperial Observatory at St. Petersburg. His greatest work was the telescope for the Chicago University, presented by Mr. Charles T. Yerkes. It is the greatest refracting telescope ever made; the lens being 40 ins. diameter with a focal length of 64 ft. With its fitting it cost about $65,000. Mr. Clark was himself an astronomer of high standing and accompanied the total eclipse expedition to Jerez, Spain, and was a member of a similar expedition to Wyoming, in 1878. He discovered 14 double stars, including the companion to Sirius, for which he obtained the Lelande gold medal, in 1862, from the French Academy of Sciences.

Mr. Barney Barnato, the South African multi-millionaire, committed suicide about June 10 by jumping overboard from a steamer, on the return trip from South Africa to England. Mr. Barnato, whose fortune is estimated as high as $300,000,000, was of obscure origin, though there seems to be no doubt that his name was originally Isaacs and that he was born of Jewish parents in London. In early youth he drifted to South Africa and engaged in various callings. He is reported to have made his start by obtaining possession of an abandoned diamond mine, in which he found diamonds in the previously rejected hard "blue dirt" of Kimberly, and sold his claims later for $10,000,000. Whether this is true or not he was a heavy speculator in diamond mines in South Africa as early as 1886, and in 1888 his interests and those of Cecil Rhodes and his friends were combined. The bulk of his fortune was made in London, however, by the skillful manipulation of stock companies, the launch of the great Kaffir boom and the creation of the Barnato Bank, Mining and Estate Corporation, in the latter of which the 2,500,000 £1 shares were sold at premiums ranging from £3 10s. to £4 each. About one year ago it was estimated that the British public had invested over $750,000,000 in his various schemes, nearly all of which were purely speculative and resulted in little or no profit to legitimate investors. He leaves a wife and three young children.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

ENGINEERS' CLUB OF CINCINNATI.
June 17. Secy., J. F. Wilson, P. O. Box 333.
ENGINEERS' CLUB OF COLUMBUS.
June 19. Secy., M. S. Hopkins, 14½ N. High St., Columbus, O.
ENGINEERS' CLUB OF PHILADELPHIA.
June 19. Secy., L. F. Rondinella., 1122 Girard St.
ENGINEERS' CLUB OF MINNEAPOLIS.
June 21. Secy., Elbert Nexsen, 1620 S. E. 4th St., Minneapolis, Minn.
TECHNICAL CLUB OF OMAHA.
June 21. Secy., J. Harry Lawrie, Omaha, Neb.
WISCONSIN POLYTECHNIC SOCIETY.
June 22. Secy., W. K. Means, Loan and Trust Bldg., Milwaukee, Wis.
ENGINEERS AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
June 23. "Telephones," Frank Van Vleck. Secy., Frank H. Olmsted, Los Angeles, Cal.
ENGINEERING ASSOCIATION OF THE SOUTH.
June 24. Secy., L. P. Brown, Nashville, Tenn.
INDIANAPOLIS ENGINEERING CLUB.
June 26. Secy., Edson F. Folsom, Indianapolis, Ind.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
June 30 to July 2. Annual meeting at Quebec. Secy., C. W. Hunt, 127 E. 23d St., New York city.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.—At the meeting on June 7, at Buffalo, Mr. Guthrie, City Engineer, read a paper giving in detail the origin, building and working of the water-works tunnel in the Niagara river. He explained the way in which the water entered in summer, and the reason why in winter the ice accumulated at the opening and blocked it up, causing the insufficient supply of water. He also explained the working of the different pumps located at the water-works station.

FRANKLIN INSTITUTE.—The monthly meeting of the Mining and Metallurgical Section was held in Philadelphia, June 9, with the President, Mr. Benj. Smith Lyman, in the chair.

Mr. H. B. C. Nitze, Chemist to the Wetherill Concentrating Co., Bethlehem, Pa., presented a paper, "Monazite," giving its chemical and mineralogical characteristics, occurrence (chiefly in North Carolina and Brazil) and industrial application for manufacturing the rare earths used in the production of the mantels for the Welsbach light. The interesting fact was noted that the annual production of this once so-called rare mineral is about 1,000,000 lbs. The finding of the mineral naturally concentrated in sea-beach deposits on certain portions of the Brazilian coast, whence it is shipped as ballast, has so greatly reduced the price, that the mining of the mineral in North Carolina has been abandoned as unprofitable. The paper was illustrated by an exhibit of the salts of the rare earths produced from Monazite, shown by Mr. Waldron Shapleigh, Chemist to the Welsbach Light Co.

Mr. Charles James, Superintendent of the Steel Department of Henry Disston & Sons, described "A Special Process for Treating Cast Iron." White iron with approximate 2.40% combined carbon and 0.4% graphitic carbon is used for the purpose. The castings are placed in a muffle furnace in which they are subjected to the action of a secret composition (said to be a powerful, volatile oxidizing agent) and maintained at a temperature slightly below fusion for 5 or 6 hours. The product may be forged and tempered and shows a remarkable increase in tensile strength. The total carbon in the product seems to be the same as in the untreated iron, but combined carbon has been substantially altered into a finely disseminated uncombined carbon. Doubts were expressed in the discussion which followed, whether the result was not due entirely to the annealing, rather than to the "medicine." The prolonged annealing was thought to be a sufficient explanation of the facts. The process is in commercial operation in a large foundry in Philadelphia, producing hatchets, hammers, etc.

Dr. D. K. Tuttle, Melter and Refiner at the U. S. Mint, in Philadelphia, gave an informal account of an examination he had been officially called on to make in connection with an alleged discovery of a process of transmuting base metal into gold. The investigation proved the fallacy of the alleged discovery, but disclosed the interesting cir-

cumstance that practically all the product sold as "pure" antimony by the best known chemical dealers, contains distinct traces of gold.

The Section adjourned over the summer recess, to reconvene on September 8, when Capt. Zalinski will lecture on "Japanese Swords," illustrating the subject with the aid of his large and valuable collection of these remarkable products of the metallurgical art.

Wm. H. Wahl, Secy

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
June 17.	School building, Corsicana, Tex		June 17
June 18.	School building, Chicago, Ill		June 17
June 18.	Sewer materials, Detroit, Mich		June 17
June 18.	Water-works materials, Greenwood, Miss		June 3
June 18.	Lamps, globes, etc., New York, N. Y		June 10
June 18.	Bridge extension, Hickory, N. C		June 10
June 18.	Asphalt paving, New York, N. Y		June 10
June 18.	Electric light plant, Little Rock, Ark		June 10
June 18.	Paving, Rochester, N. Y.		June 10
June 18.	Paving, Detroit, Mich		June 17
June 18.	Street grading, etc., Des Moines, Ia		June 17
June 18.	Street improvements, Chicago, Ill		June 17
June 18.	Water pipe, Saginaw, Mich		June 17
June 19.	Fire hose (3,000 ft.), Duluth, Minn		June 17
June 19.	Road improvements, Kansas City, Mo		June 17
June 19.	Life saving station, Washington, D. C		June 17
June 19.	Bridge masonry, Harrisburg, Pa		June 17
June 19.	Repairing drawbridge, Brooklyn, N. Y		June 17
June 19.	Stone arch culvert, Kansas City, Mo.		June 10
June 19.	Water-works, Farley, Ia.		June 10
June 19.	Sewer system, Solvay, N. Y.		June 10
	Advertised, Engineering News, June 10.		
June 19.	School building, Norwalk, O		June 3
June 19.	School building, Struthers, O.		June 3
June 19.	Machine tools, Watervliet, N. Y		June 3
June 19.	Brick paving, Alexandria, Ind.		June 3
	Advertised, Eng. News, June 3 and 10.		
June 19.	Brick paving, Monmouth, Ill.		June 3
June 19.	Completing steel bridge, Port Huron, Mich		May 27
	Advertised, Engineering News, May 27.		
June 20.	Storm sewer, Williamsport, Pa		June 17
June 20.	Sewers, Lima, O		June 17
June 21.	Water and sewer bonds, Chester, S. C		June 17
June 21.	Removing station, Boston		June 17
June 21.	Life saving station, Chatham, Mass		June 17
	Advertised, Engineering News, June 17.		
June 21.	Gas franchise, Sacramento, Cal		May 27
June 21.	Water main (11,000 ft.), Binghamton, N.Y		June 3
	Advertised, Eng. News, June 3 and 10.		
June 21.	Tile sewers, Union City, Ind.		June 3
June 21.	Gravel road, Union City, Ind.		June 3
June 21.	Alterations to station, New York, N. Y		June 10
June 21.	Water-works, Shabbona, Ill		June 10
	Advertised, Engineering News, June 10.		
June 21.	Street paving, etc., Lafayette, Ind		June 10
June 21.	Brick paving, Hornellsville, N. Y		June 10
	Advertised, Eng. News, June 10 and 17.		
June 21.	Bridge painting, New York, N. Y		June 17
June 21.	Improvement bonds, Park Ridge, N. J		June 17
June 21.	Improvement bonds, Midland Park, N. J		June 17
June 21.	Road bonds, Roslyn, N. Y		June 17
June 21.	Asphalt walks, New York, N. Y		June 17
June 21.	School building repairs, New York		June 17
June 21.	Paving and curbing, Jersey City, N. J		June 17
June 21.	Brick paving, Galesburg, Ill		June 17
June 22.	Brick paving, etc., Jamestown, N. Y		June 17
June 22.	Fire escape, Philadelphia, Pa		June 17
June 22.	Electric lighting contract, Amsterdam, N. Y		June 17
	Advertised, Engineering News, June 17.		
June 22.	Street paving, Kansas City, Mo		June 17
June 22.	Masonic temple, Pontiac, Mich		June 17
June 22.	Hoist bridge, Sidney, O		June 17
June 22.	Paving, Philadelphia, Pa		June 17
June 22.	Street grading, Amsterdam, N. Y		June 17
June 22.	Water pipe (22,000 ft.), Norwalk, O		June 10
June 22.	Machine tools, Watertown, N. Y		June 10
	Advertised, Eng. News, June 10 and 17.		
June 22.	Dredging in Elizabeth River, Va		June 3
	Advertised, Eng. News, June 3 and 10.		
June 22.	Paving bonds, Stapleton (S.I.), N. Y		June 3
June 22.	Bank protection, Oswego, N. Y		May 27
	Advertised, Eng. News, May 27 to June 17.		
June 22.	School buildings, etc., Buffalo, N. Y		June 17
June 23.	Reservoir, Parrsboro, N. S		June 17
June 23.	Court house, Anderson, S. C		May 22
June 23.	Water-works, Gibsonburg, O.		June 10
	Advertised, Eng. News, June 10 and 17.		
June 23.	Brick and pipe sewers, Ironton, O.		June 10
June 23.	Street grading, West Hoboken, N. J		June 17
June 23.	Street paving, Lock Haven, Pa		June 17
June 23.	Water-works bonds, Parrsboro, N. S		June 17
June 24.	Street paving, etc., Brooklyn, N. Y		June 17
June 24.	Brick sewers (2,400 ft.), London, Ont		June 17
June 24.	Buildings, etc., Flandreau, S. Dak		June 17
June 24.	Street paving, Brooklyn, N. Y		June 17
June 24.	Street paving, etc., Dale, Pa		June 17
June 24.	Building, Chippewa Falls, Wis.		June 10
June 24.	Plumbing, Milwaukee, Wis.		June 10
June 24.	Water-works, White Sulphur Spgs., Mont		June 10
June 24.	Water pipe (8,900 ft.), Boston, Mass		June 10
	Advertised, Eng. News, June 10 and 17.		
June 24.	Completing water-works, Nyack, N. Y		June 10
	Advertised, Eng. News, June 10 and 17.		
June 24.	Sewers, Tonawanda, N. Y		June 10
	Advertised, Eng. News, June 10 and 17.		
June 24.	Steam tenders (3), St. Louis, Mo		June 3
June 25.	Brick and pipe sewers, Des Moines, Ia		June 17
June 25.	Building repairs, Chicago, Ill		June 17
June 25.	Court house, Gatesville, Tex		June 17
June 25.	Iron, steel, etc., Governor's Island, N.Y. H		May 27
June 25.	Hospital, Fort Hamilton, N. Y. H		June 10
June 25.	Pipe sewers (11,100 ft.), Spokane, Wash		June 10
June 25.	Water-works, Scranton, Ia.		June 10
June 25.	Water-works bonds, Waterville, Minn		June 10
June 25.	Water pipe (11,415 ft.), Spokane, Wash		June 10
June 25.	Street paving, St. Louis, Mo		June 17
June 25.	Levee, etc. (185,000 cu. yds.), Albany, Ill		June 17
June 25.	Street improvement, Marion, O		June 17
June 25.	Iron and stone bridges, Wilkesbarre, Pa		June 17
June 25.	Paving, Holyoke, Mass		June 17
	Advertised, Engineering News, June 17.		
June 25.	Bridge repairing, Holyoke, Mass		June 17
June 25.	Repairing pier, Frankfort Harbor, Mich		June 17
	Advertised, Eng. News, June 17 and 24.		
June 25.	Pumping plant, Albany, Ill		June 17
June 26.	Water-works, Chatham, N. J.		June 10
	Advertised, Engineering News, June 10.		
June 26.	Barracks, etc., Burlington, Vt.		May 27
	Advertised, Eng. News, May 27 to June 17.		
June 28.	Removing ledges, Boston, Mass		June 3
	Advertised, Eng. News, June 3 to 17.		
June 28.	Dredging in Essex River, Mass		June 3
	Advertised, Eng. News, June 3 to 17.		
June 28.	Court house, Galveston, Tex.		June 10
June 28.	Street grading, South Bend, Ind		June 10
June 28.	Water well, Oil City, Pa		June 10
	Advertised, Engineering News, June 10.		
June 28.	Plans for water-works, Nelson, B. C		June 17
June 28.	Bell and clock, Lancaster, O		June 17
June 28.	Street macadamizing, Wabash, Ind		June 17
June 28.	Asphalt paving, etc., New York, N. Y		June 17
June 28.	Street paving, Brooklyn, N. Y		June 17
June 28.	Paving, Reading, Pa		June 17
	Advertised, Engineering News, June 17.		
June 28.	Plans for sewer system, Nelson, B. C		June 17
June 28.	Sewers, New York, N. Y		June 17
June 29.	Heating and ventilation, Lowell, Mass		June 17
June 29.	Macadamizing, West Milford, N. J		June 17
June 29.	Bridge piers, Athens, O		June 17
June 29.	Steel bridge, Stratford, Ont.		June 17
June 29.	Lighthouses, Boston, Mass.		June 10
June 29.	Beacon, light stations, etc., Ram's Isld, Me		June 10
	Advertised, Engineering News, June 10.		
June 30.	Stone bridges (2), Sioux Falls, S. D		June 10
June 30.	Water-works supplies, Cincinnati, O		June 10
June 30.	Street paving, Cincinnati, O.		June 10
June 30.	Gun emplacemts, Marrowstone Point, Wash		May 27
	Advertised, Eng. News, May 27 to June 17.		
June 30.	Bridge superstructures, So. McAlester, I.T		May 20
June 30.	Heating and ventilation, Athens, O		June 17
June 30.	Street macadamizing, Paterson, N. J		June 17
June 30.	Water-works bonds, Elyria, O.		June 17
June 30.	Street paving, etc., Cincinnati, O		June 17
June 30.	Court house bonds, Paterson, N. J		June 17
June 30.	Paving water channel, Altoona, Pa		June 17
	Advertised, Engineering News, June 17.		
July 1.	Water-works, Freedom, Pa		June 17
	Advertised, Eng. News, June 17 and 24.		
July 1.	Street paving, Binghamton, N. Y		June 17
	Advertised, Eng. News, June 17 and 24.		
July 1.	Brick paving, etc., Lansingburg, N. Y		June 17
	Advertised, Eng. News, June 17 and 24.		
July 1.	Street paving, Washington, N. C		June 17
	Advertised, Eng. News, June 17 and 24.		
July 1.	Court house, Anderson, S. C		May 13
July 2.	Water-works, Pittsford, N. Y		June 17
July 2.	Electric light plant, Oshkosh, Wis		June 17
July 2.	Water-works, etc., Chester, S. C		June 17
	Advertised, Eng. News, June 17 and 24.		
July 2.	Sewer system, etc., Chester, S. C		June 17
	Advertised, Eng. News, June 17 and 24.		
July 5.	Sewer system, Paducah, Ky		June 17
	Advertised, Eng. News, June 17 to July 1.		
July 5.	Wood bridges (5), Leavenworth, Kan		June 17
July 5.	Electric light plant, Fosston, Minn		June 17
July 5.	School building, Cincinnati, O		June 17
July 5.	Water-works, Fosston, Minn		June 17
July 5.	Tunnel, Riverside, Ill.		June 10
	Advertised, Engineering News, June 10.		
July 6.	Submarine cable, Willets Point, N. Y		June 10
	Advertised, Eng. News, June 10 to July 1.		
July 6.	Stone, cement, etc., Washington, D. C		June 17
	Advertised, Eng. News, June 17 to July 1.		
July 6.	Pipe sewers, Belfast, Me		June 17
July 6.	Sewer tunnel, Cohoes, N. Y		June 17
	Advertised, Eng. News, June 17 and 24.		
July 7.	Water-works, Port Leyden, N. Y		June 17
July 7.	Pipe sewers, Vallejo, Cal		June 17
July 7.	Brick sewers, Hoboken, N. J		June 17
July 7.	Street paving, Lima, O		June 17
July 7.	Asphalt paving, Hoboken, N. J		June 17
July 7.	Wharf, etc., Stockton, Cal		June 17
July 7.	Bank building, Norfolk, Va.		June 3
July 8.	Bridge superstructure, Warren, O		June 17
July 10.	Sewer pipe, etc. (54,000 ft.), Wheaton, Ill		June 10
July 12.	Water-works bonds, Wauseon, O.		June 10
July 12.	Paving bonds, Lima, O		June 17
July 14.	Reservoir, Columbia City, Ind		June 17
July 14.	Gravel road, Camden, N. J		June 17
	Advertised, Eng. News, June 17 to July 1.		
July 14.	Pump house, etc., Jefferson Barracks, Mo		June 17
July 15.	Street lighting, Sayre, Pa		June 17
July 16.	Post office interior, Milwaukee, Wis		June 17
	Advertised, Eng. News, June 17 and 24.		
July 21.	Street lighting, Bellevue, O		June 17
July 24.	Plans for capitol, Harrisburg, Pa		May 13
Aug. 3.	Court house, Brunswick, Ga		June 17
Nov —.	Plans for public building, Mexico, Mex		May 6
No date.	Canal work, Portland, Ore		June 17

RAILWAYS.

ARKANSAS.—It is reported that a railway is projected from a point on the Mississippi River, near Gaines Landing, to Texarkana, a distance of about 175 miles. J. M. Parker and Randall Silverman, Cripple Creek; and H. K. Devereaux, Colorado Springs, Colo., are said to be interested.

DULUTH, SOUTH SHORE & ATLANTIC.—A press report states that work will begin about July 1 on the projected extension from Houghton to Calumet, Mich. H. J. Payne, Ch. Engr., Marquette, Mich.

ILLINOIS CENTRAL.—Local reports state that this company will soon extend its line from Onawa, Ia., to the Missouri River. J. F. Wallace, Ch. Engr., Chicago, Ill.

INTER MOUNTAIN.—It is reported that surveys are now being made for this proposed road from Boulder, Colo., to Ward and Spring Gulch, Colo., a distance of 15 miles. It is proposed to use this road for the transportation of ore and coal from the mines of Boulder county. E. C. Thompson, Vice-President, Meadville, Pa.

MEXICAN NORTHERN.—This company has decided to extend its road to Bouquillas del Carmen, on the Rio Grande River, for which purpose it is expected that $3,000,000 in bonds will be issued. R. S. Towne, Pres. and Gen. Mgr., Mexico, Mex.

MISSOURI, ARKANSAS & SOUTHERN.—This company was incorporated at Jefferson City, Mo., June 10, with a capital stock of $600,000. It is proposed to build a railway from McElheny, Mo., to connect with the St. Louis & San Francisco R. R. at Clarendon, Ark., a distance of 40 miles. The incorporators are D. T. Jackson, W. I. Rush, Zack Schropp, and others, McElheney, Mo.

MEXICO.—William Stuart, of the firm of McLennan, Stuart & Chapman, Toronto, Ont., has gone to San Geronimo, Mexico, with several associates, at which place they intend to survey and locate a railway line in a southeastern direction parallel to the Pacific Ocean, and about twenty or thirty miles from the coast, skirting the foothills of a high mountain range, which lies to the left of the proposed line, until the boundary of Guatamala is reached, about 300 miles from the starting point. In addition to the above, about 150 miles of branch connections are projected. J. D. Maclennan, Gen. Mgr. Construction, Cleveland, O.

MILFORD, MATAMORAS & NEW YORK.—This company was recently incorporated with a capital stock of $50,000. It is proposed to build a road from Matamoras, Pa., to Fort Jervis, N. Y. The directors are: Louis H. Smith, P. O. Deyo, Joseph H. Thompson, Jr., F. T. Sargent and Chas. M. Clark, New York, N. Y.; L. Monthemont and E. Monthemont, Milford, Pa.; W. P. Ridgeway, Matamoras, Pa.; A. E. Lethbridge, Brooklyn, N. Y.

MORLEY & MOREHOUSE.—This company was incorporated at Jefferson City, Mo., May 28, with a capital of $150,000. The railway to be constructed is expected to extend from Morley, where it connects with Houck's Missouri & Arkansas Ry., to a point half a mile south of the Cairo branch of the St. Louis, Iron Mountain & Southern R. R., near Morehouse. The incorporators are L. B. Houck, Leo Doyle, E. F. Blomyer and others.

NEW YORK & NEW ORLEANS.—This company was incorporated at Trenton, N. J., May 6, with a capital stock of $100,000. It is proposed to construct a railway from Roselle, N. J., through the town of New Orange, forming a new suburban belt line, which will connect with the Jersey Central, Lehigh Valley, Philadelphia & Reading, Baltimore & Ohio, and Delaware, Lackawanna & Western, in the suburbs of Jersey City, Newark and Elizabeth. The incorporators are: Charles W. Manahan, Jr., East Orange, N. J.; Dennis Long, Union, N. J.; George B. Frost, Newark, N. J.; Theodore C. English and N. C. J. English, Elizabeth, N. J.; Robt. Grimes and W. S. McCord, Elmira, N. Y.

NEW RIVER & VIRGINIA.—This company was incorporated at Wheeling, W. Va., June 2, with a capital stock of $25,000. It is proposed to operate a short line in Fayette and Mercer counties. The incorporators are: Morris Harvey, Fayetteville, W. Va.; W. D. Thurmond, Oak Hill, W. Va.; John Potut, C. T. and G. W. Jones, Red Star, W. Va.

NORTH & SOUTH.—Reports state that the preliminary survey has been completed for this road, which is to be constructed from Sedalia, Mo., to Miami, Mo., a distance of 52 miles. Col. J. E. House, Ch. Engr., Omaha, Neb.

PITTSBURG, CHAUTAUQUA & LAKE SHORE.—A press report states that this line is to be built from Chautauqua, N. Y., to Warren, Pa., via Panama and other villages. At Chautauqua it will connect with the Jamestown & Lake Erie Ry., and the electric road being built from Chautauqua to Westfield. At Warren a connection is expected to be made with the Dunkirk, Allegheny Valley & Pittsburg R. R. Contractors, Keckler & Gilford, New York, N. Y.

RED STAR LINE.—This company was incorporated in West Virginia, May 27, by J. M. Richards, William Richards, C. J. Bibb, Thomas E. Richards and W. H. Richards, Oak Hill, W. Va., with a capital stock of $20,000. It is proposed to build a road from Red Star, on the Chesapeake & Ohio Ry., along the valley of Smith's Branch, to the mouth of White Oak Creek, thence up the valley of that creek to the head waters of Wolf Creek, thence along Wolf Creek to Fayette station, thence to a point on the Greenbrier & New River Ry., in Fayette county.

RIO GRANDE, SIERRA MADRE & PACIFIC.—This company has been incorporated by John T. Terry, Edwin D. Morgan, Solon Humphreys, A. Gifford Agnew, George Rowland, Sidell Tilghman, John B. Lawrence, Jr., W. Morton Grinnell and Edward M. Shepard, New York, N. Y., with a capital stock of $3,120,000. It is proposed to operate a line, 400 miles in length, running from Juarez, in the state of Chihuahua, Mexico, to Corrallitas, and thence to Guerroro. The road is now being constructed by the Sierra Madre Construction Co., of which A. Foster Higgins, New York, N. Y., is the president.

ROARING CREEK & CHARLESTON.—It is reported that this company is constructing a siding about 1,500 ft. long, and a 60-ft. bridge over Roaring Creek, at Maibee, W. Va., and also a 3-mile branch up "Jim Wood" Valley to a timber and coal district. O. C. Womelsdorff, Gen. Mgr., Womelsdorff, W. Va.

SEABOARD AIR LINE.—A press report states that this company is contemplating the construction of a road through Hamlet, N. C., via Chesterfield, to Columbia, thereby reaching the latter place much more directly than, as previously, via the Columbia, Newberry & Laurens R. R. W. W. Gwathmey, Ch. Engr., Portsmouth, Va.

SOUTHERN PACIFIC.—Our correspondent informs us that this company is extending the Randsburg survey from Mojave, Cal., into the Panamint country. W. Hood, Ch. Engr., San Francisco, Cal.

TERMINAL RY. OF BUFFALO.—Reports state that this railway is soon to be constructed by a company which was incorporated in June, 1895. It is proposed to make a connection with the Lake Shore & Michigan Southern Ry., at Blasdell, N. Y., and with the New York Central & Hudson River R. R., at Depew, a distance of eight miles. The incorporators were John M. Brinker, R. W. Jones, B. L. Sheldon, C. R. Risley, Buffalo, N. Y.; H. L. Sprague, New York, N. Y., and others.

WADLEY & MT. VERNON.—Press reports state that this line will soon be extended to Fitzgerald, Ga., a distance of 75 miles, crossing the Southern Ry., and the Georgia & Alabama Ry., at Helena, Ga. G. D. Tyson, Gen. Mgr., Atlanta, Ga.

WEST VIRGINIA NORTHERN.—It is reported that final surveys are being made for the 22-mile extension of this road from Kingwood to Morgantown, W. Va. J. A. Martin, Gen. Mgr., Kingwood, W. Va.

WISCASSET & QUEBEC.—It is proposed to reorganize this company on a new basis, and to make it a broad gage line, instead of a narrow one as at present, and also to extend the line so as to form a connection between the Canadian Pacific Ry. at Greenville Junction, Me., and the Bangor & Aroostock R. R. and the Atlantic coast. W. F. P. Fogg, Gen. Mgr., Wiscasset, Me.

STREET AND ELECTRIC RAILWAYS.

KINEO, ME.—It is reported that an electric road will be built along the Moosehead and Cumberland lakes, touching at all the principal summer resorts. O. A. Dennen, Kineo House, Moosehead Lake, may be addressed.

SOUTH WINDHAM, ME.—A special meeting of the voters of the town was held June 5 to act on a proposition to loan the town's credit for $30,000 to assist in the construction of the Westbrook, Windham & Harrison Electric Ry. An adjournment was taken until June 7.

BOSTON, MASS.—The executive committee of the Boston Elevated R. R. Co. has been authorized to get estimates for the complete construction of the elevated railway structure and to prepare a complete schedule of the value of the property to be affected, with a view to estimating accurately the entire cost of the system.

WESTFIELD, MASS.—The right of way for an electric road two miles long has been granted; the rails have been already bought and contracts will soon be let.

WINTHROP, MASS.—The Winthrop Street Ry. Co. has been incorporated to build a street railway eight miles in length. Capital stock, $80,000. Directors: W. G. Wheildon, Wm. W. Davis, Edward F. Draper and Aaron R. Sanderson, of Boston; Saml. G. Irwin, Winthrop; Geo. S. Forbush, Brookline, and Chas. E. Folsom, Winchester.

HARTFORD, CONN.—Track work has been completed on the electric road between New Britain and Hartford, and the overhead work is under construction.

BROOKLYN, N. Y.—The Brooklyn City & Newtown R. R. Co. has filed a certificate at Albany showing the proposed extension of its road to the city line. Pres., J. N. Partridge.

BUFFALO, N. Y.—The contract has been let for the side poles for the first 15 miles of the new line to be built by the Buffalo Traction Co. to the Buffalo Bridge & Iron Works.

NEW PALTZ, N. Y.—The application of the New Paltz & Wallkill Valley R. R. Co. to cross the tracks of the West Shore R. R. at Highland Station, has been denied by the railroad commissioners, on the ground that the crossing would be dangerous and that the road should be built upon a different route.

NEW YORK, N. Y.—The Metropolitan Street Railway Co. has been granted permission by the state railroad commissioners to change its motive power from horses to an underground trolley system on the Fourth and Madison Ave. lines, which were recently leased from the New York & Harlem R. R. Co.

PORT JERVIS, N. Y.—The officers of the company which proposes to build an electric road in this place have asked that their franchise be changed to permit them to build but 2½ miles this year instead of four miles. The trustees have refused to alter the franchise and it is thought that no work will be attempted at present. Engr., Irving Righter.

RENSSELAERVILLE, N. Y.—The application of the Greenbush & Nassau Electric Ry. Co. for a franchise to build an electric road 17 miles long has been granted. The road will cost $200,000. Pres., Wm. D. Barnes.

ST. GEORGE (S. I.), N. Y.—The Midland R. R. Co. has asked for a franchise to build a line of electric road on Hyatt St., and also to double track the Cove road. The latter franchise has been granted.

TONAWANDA, N. Y.—The Tonawanda Electric R. R. Co. has been granted a franchise to extend its line through the towns of Wheatfield and Niagara and city of Niagara Falls. Gen. Mgr., Geo. P. Smith.

HADDONFIELD, N. J.—The Camden & Suburban R. R. Co. has accepted the ordinance recently passed by the borough commissioners and work will commence at once.

ROSELLE, N. J.—The New York & New Orange R. R. Co. has been incorporated to build a line from this place through the town of New Orange. Capital stock, $100,000. Pres., Robt. Grimes, Elmira, N. Y.; Vice-Pres., Dennis Long, Union; Treas., W. S. McCord, Elmira, N. Y.; Secy., C. W. Manahan, East Orange.

McKEESPORT, PA.—The McKeesport, Monongahela & Finleyville Ry. Co. has been incorporated to build a line 18 miles long. Capital stock, $110,000. Pres., J. L. D. Speer, Pittsburg.

CARNEGIE, PA.—The Carnegie, Heidelbaugh & Bridgeville Ry. Co. has been incorporated to build a line 4½ miles long in this city. Capital stock, $30,000. Pres., John C. Reilly, Pittsburg.

PITTSBURG, PA.—The West End, Mount Washington & Banksville St. Ry. Co. has been incorporated with a capital stock of $12,000 to operate a short line in this city. Pres., John C. Reilly.

READING, PA.—The Reading Traction Co. has given $6,500 for the right of way over the Perkiomen and Reading Turnpike for half a mile.

WEST NEWTON, PA.—The West Newton Passenger St. Ry. Co. has accepted the borough ordinance requiring it to build two tracks on Second Ave. and to have cars running within one year.

BALTIMORE, MD.—The Central Ry. Co. has been granted permission to lay tracks on some of the streets in East Baltimore, according to report.

WHEELING, W. VA.—The Suburban Electrical Co. has withdrawn its application for a franchise.

ATLANTA, GA.—The Atlanta & Douglasville Ry. Co., with a capital stock of $375,000, has been granted a franchise to build an electric road 25 miles in length, between this city and Douglasville. Incorporators are: J. S. James, Douglasville; Charles Pratt, Atlanta; George L. Bell, Gainsville.

NEW ORLEANS, LA.—The Orleans & Jefferson Ry. Co. has been chartered, with a capital stock of $250,000, to build an electric railway line on Napoleon Ave. Pres., Wm. R. Hall; Vice-President, Robt. R. Zell; Secy., Cyrus B. Buchanan.

JACKSON, MISS.—The city council has granted a second franchise to parties who contemplate building an electric street railway. C. W. Howard, Chattanooga, Tenn., is interested.

CRESCENT HILL, KY.—The Louisville Ry. Co. is reported to be willing to extend its line to this place if the city will grant it the right of way along the Shelbyville turnpike.

AKRON, O.—It is reported that the electric road projected in this place will be built this summer. W. A. Lynch, Canton, is interested.

CLEVELAND, O.—Work on the Akron & Cuyahoga Falls Rapid Transit Co.'s railway will be begun as soon as the consents can be obtained on the Ravenna and Doylestown extensions. Gen. Mgr., Thos. F. Walsh.—The Cleveland & Akron Suburban Electric Ry. Co. has been incorporated with capital stock of $500,000 by H. C. Mason, Wm. C. Gayer, Dr. J. C. Fritch, J. A. Spitzig and F. L. Taft.

MARIETTA, O.—It is reported that the line of road from this city to Williamson and down the Ohio River to Parkerburg will be built by New York parties. Negotiations for the purchase of the necessary property in Parkerburg are now under way.

TOLEDO, O.—The right of way has been secured for nearly the entire length of the proposed electric road to Genoa. It is also proposed to extend the line to Fremont.

CHICAGO, ILL.—The Chicago, Blue Island & Harvey R. R. Co. has been granted a franchise for three miles of electric railway between the towns. The company will be required to light the right of way and pave the road from curb to curb when the gross receipts reach $7,000 a mile. The capital stock is $250,000. Wm. H. David and R. E. Jones are among the stockholders.

MARSEILLES, ILL.—Preliminary investigations have been made for an electric railway from this city to Lake Geneva. It is expected that surveys will be started within 30 days. Engr., L. B. Merriam, De Kalb, Ill.

WAUKESHA, WIS.—The Waukesha Electric Ry. Co. has been organized with a capital stock of $1,000. Stanley I. Henderson, Samuel W. Williams and Fred W. Henderson are said to be interested.

ST. LOUIS, MO.—The St. Louis, Clayton & Creve Coeur Lake R. R. Co. has been organized with a capital stock of $120,000. It is proposed to construct and operate an electric road between Clayton and Creve Coeur Lake, in St. Louis county, a distance of 12 miles. The incorporators are G. W. Baumhoff, Charles Hodgman, Samuel Barnes, John L. Miers, Luther S. Handy and Lon O. Hocker, all of St. Louis.

LONDON, ONT.—Reports state that the London St. Ry. Co. will extend its tracks to Pottersburg.

ELECTRIC LIGHT AND POWER.

FALL RIVER, MASS.—Bids are asked for installing a new wiring system in the city hall at this place. Chas. Henry Davis, C. E., No. 4 State St., Boston.

MERIDEN, CONN.—C. A. Learned, Supt. Meriden Electric Light Co., writes us that his company is installing a power circuit and changing the alternating system of incandescent lighting to the direct three-wire Edison system.

AMSTERDAM, N. Y.—Bids are asked until June 22 for lighting the streets of this town for three or five years, with not less than 140 1,200-c. p. arc lights and 10 50-c. p. incandescent lights; bond, $5,000. Thos. J. Hazlett, Cy. Clk.

FLUSHING (L. I.), N. Y.—Reports state that a special election will be held June 24 to vote on the question of installing additional lights in different parts of the village.

NEW YORK, N. Y.—The following bids were opened June 10 by the commissioners of the sinking fund for furnishing an electric light plant for the criminal court building:

J. F. Buchanan & Co., Phila., Pa. (accepted)..	$37,770
Alexander-Chamberlain Electric Co., 56 W. 22d St.	37,800
New York Electric Equipment Co., 59 Duane St..	46,864
Commercial Construction Co., 1 Madison Ave....	48,113
Manhattan Supply Co., Chambers St. and West Broadway	48,947
Western Electric Co., Thames and Greenwich Sts..	61,369, 60,774, 58,529

HATBORO, PA.—Reports state that a syndicate of Jenkintown capitalists have obtained a 20-year franchise from the council of this borough to construct and operate a water and light plant. It is proposed to absorb the Hollowell electric light plant, which ceased operations some months ago, and increase the plant so as to extend throughout the borough and adjacent territory. The improvements will cost about $25,000.

SAYRE, PA.—Bids are asked until July 15 for lighting the streets with 26 2,000-c. p. arc lights; bond, $5,000. E. J. Connelly, Chn. Light Com.

SISTERSVILLE, W. VA.—J. P. Sweeney, Recorder, writes us that the Sistersville Electric Light & Power Co., capital stock, $12,000, is putting in a plant and expects to have same in operation in about ten days.

CHESTER, S. C.—Bids are asked for constructing an electric light plant. Jas. McLarnon, Secy. Comrs.; C. O. Mailloux, Elec. Engr., 150 Nassau St., New York city.

SENOIA, GA.—This town is reported to be considering the question of constructing a municipal electric light plant.

COVINGTON, KY.—It is reported that the public buildings are to be lighted by electricity and that an electrical expert is to be employed to prepare plans and specifications. Mr. McLean, Chn. Com.

LOUISVILLE, KY.—Local papers state that an electrical building will be erected at the state college.

LUDLOW, KY.—The Suburban Electric Light Co. of Covington, is said to be considering the construction of a plant at this place. Supt. Holden, Covington, Ky.

BELLEVUE, O.—Bids are asked until July 21 for lighting the streets for five or seven years. W. H. Dimick, Village Clk.

TOLEDO, OHIO.—The county commissioners are said to have decided to install an electric light plant in the court house, power house to furnish light for the jail, armory and court house.

EDINBURG, IND.—Bids are asked until July 12 for constructing an electric light plant. E. E. Carvin, Clk.

CENTERVILLE, MICH.—Press reports state that the construction of a municipal electric light plant is being considered and that there is considerable probability of its being started in the near future.

OTSEGO, MICH.—The Otsego Electric Co. will soon commence the construction of a new power house, according to reports.

OSHKOSH, WIS.—Bids are asked until July 2 for installing an electric light plant in the Northern hospital; estimated cost, $15,000.

FOSSTON, MINN.—Bids are asked until July 5 for constructing a water-works and electric light system. W. B. Sheffield, Village Recdr; C. F. Loweth, Engr., St. Paul.

JUNCTION CITY, KAN.—Thos. W. Dorn, Cy. Clk., writes us that this city is contemplating putting in a municipal electric light plant this summer, to do city and private lighting.

VICTOR, COLO.—This town is about to construct a new electric light plant, at an estimated cost of about $10,000, according to reports.

TRUCKEE, CAL.—Our correspondent informs us that the electric light company has decided to install an entirely new plant at an estimated cost of about $4,000.

REDLANDS, CAL.—H. F. Sinclair, Mgr. Southern California Power Co., is said to have awarded the contracts for the company's equipment of electrical machinery and transmission wires. The contract for the machinery for the generating station in Santa Ana Canyon was awarded to the General Electric Co., Schenectady, N. Y., while the Westinghouse Electric & Mfg. Co., Pittsburg, Pa., was given the contract for supplying the machinery for the distributing stations at Los Angeles and Pasadena. The two contracts amount to about $140,000. An order for $600,000 lbs. of copper wire also went to an Eastern firm.

PAYSON, UTAH.—This town is said to have voted to construct or purchase an electric light plant, to cost about $5,000. Mayor Peery may be addressed.

NEW COMPANIES.—Crystal Lake Irrigation & Power Co., Glendora, Cal.; to develop about 1,500-HP. to be transmitted to Pasadena and Los Angeles, for pumping and lighting purposes. Two power houses will be built and for a part of the distance the water will be run in steel pressure pipes. Pres., R. W. Dawson; Secy., H. G. Baker.

Capitaine Motor Co., Camden, N. J.; $50,000 with $1,000 paid in; to buy and sell all kinds of motors and machinery; Geo. F. Harris, Philadelphia; E. W. Preston, Merchantville, and A. M. Heritage, Bryn Mawr, Pa.

Home Battery Power Co., New York, N. Y.; $300,000, with $100 paid in; to produce electricity by chemicals, etc., and to sell and deal in same; A. E. McMulkin, Meyer Hahn, Chas. B. Hovey, Wm. H. Carroll, Joseph Kerr, New York city.

Continental Electric Co., Portland, Me.; to manufacture and deal in electrical appliances; Pres., Walter B. Hill, of West Duxbury, and Treas., John G. Robinson, of Pembroke.

Allegan Hydraulic Co., Allegan, Mich.; $100,000; it is proposed to build a dam and power house on the Kalamazoo River, about three miles from here. Harry R. Hall, C. H. Frisbie and C. E. Snow, of Jackson, Mich., are the incorporators.

Chatfield Electric Light & Power Co., Chatfield, Minn.; $50,000; Joseph Underleak, O. L. Ober and M. H. Crane.

Bradford Electric Co., Bradford, Vt.; Pres., William Allen; Vice-Pres., H. E. Parker and B. S. Hooker; George A. Dickey, Clk.; Treas., Charles Jones.

Watsontown Electric Light Co., Watsontown, Pa.; $15,000, with $1,500 paid in; to supply light, heat and power; Treas., J. W. Morris, Watsontown, Pa.

BRIDGES.

KINGMAN, ME.—Reports state that a 300-ft. iron and steel bridge will be built this year over the Mattawamkeag River at this place. There will be a 220-ft. and an 80-ft. span, one pier, two granite abutments and an 18-ft. roadway. The county commissioners will have charge of the work.

HOLYOKE, MASS.—Our correspondent informs us that an inspector has been at work on the several bridges in this city and has reported that they all need considerable repairing. The engineer is said to have stated that it will be necessary to renew from 1,000 to 1,200 rivets in each span of the South Hadley Falls bridge. The board of public works has the report under consideration.

HOLYOKE, MASS.—Bids are asked until June 25 for repairing several iron bridges. J. J. Kirkpatrick, Cy. Engr.

NORTH ADAMS, MASS.—The following bids were received June 12 for constructing a 76-ft. steel plate girder bridge with a 32-ft. roadway, one 7-ft. and one 5-ft. sidewalk, with buckle-plate flooring carrying pavement:

Norton Iron Works, Boston, Mass.	$7,995
Pennsylvania Steel Co., Steelton, Pa.	6,150
New Jersey Steel & Iron Co., Trenton, N. J.	6,075
King Bridge Co., Cleveland, O.	5,875
Union Bridge Co., Athens, Pa.	5,714
Youngstown Bridge Co., Youngstown, O.	5,700
Buffalo Bridge & Iron Works, Buffalo, N. Y.	5,700
Vermont Construction Co., St. Albans, Vt.	5,687
Groton Bridge & Mfg. Co., Groton, N. Y.	5,677
Wrought Iron Bridge Co., Canton, O.	5,660
Mace Moulton, Springfield, Mass.	5,646
Pittsburg Bridge Co., Pittsburg, Pa.	5,555
Rochester Bridge & Iron Works, Rochester, N. Y.	5,515
Hilton Bridge Co., Albany, N. Y.	5,500
Edge Moor Bridge Works, Wilmington, Del.	5,490
Boston Bridge Works, Boston, Mass.	5,095
Berlin Iron Bridge Co., East Berlin, Conn. (accepted)	4,989

BROOKLYN, N. Y.—Bids are asked until June 19 for repairing the draw bridge over Newtown Creek at Greenpoint Ave., and for removing the old approach. William J. Wassmuth, Secy. Joint Bridge Com., City Hall.; John J. McLaughlin, Engr., Queens County, Bank Bldg., Jamaica.

NEW YORK, N. Y.—Bids are asked by the Commissioners of Public Parks until June 21 for painting the iron work of Macomb's Dam bridge across Harlem River.

PLAINFIELD, N. J.—Local papers state that William T. Kirk was awarded, June 11, the contracts for constructing the proposed bridges on Watching and Sycamore Aves., at $8,200 for the former and $3,500 for the latter. The contract for the masonry work for both bridges was awarded to F. Farrio at $5 a cu. ft.

HARRISBURG, PA.—Bids are asked until June 9 for constructing the masonry work of the proposed 30-ft. through truss highway bridge, between Linglestown and Hummelstown. M. B. Cowden, Cy. Engr.

MERCER, PA.—Geo. C. Hamilton, Clk. County Comrs., informs us that the following contracts were awarded June 8 for constructing bridges, as noted in our issue of May 27: over Shenango River at Sharon, Penn Bridge Co., Beaver Falls, Pa., $8,900; bridge in New Vernon township, $895; Coolspring township, $895; Pymatuning township, $698; Wolfcreek township, $598, to the Pittsburg Bridge Co., Pittsburg, Pa.

NEW KENSINGTON, PA.—Reports state that the commissioners of Allegheny and Westmoreland counties will be petitioned to construct a bridge across the Allegheny River, near this town, at an estimated cost of about $80,000.

WILKESBARRE, PA.—Bids are asked until June 25 for constructing 29 stone arch and three iron bridges at an estimated cost of $11,725 for the former and $3,600 for the latter. Joseph D. Lloyd, Controller.

RALEIGH, N. C.—Our correspondent informs us that the Southern Ry. Co. will replace its present wooden structure across Lenoir St. with an iron and steel bridge with stone pillars and abutments and iron girders, having been so notified to do by the city authorities by order of a resolution of the board of aldermen. C. H. Hudson, Ch. Engr., Washington, D. C.

LOGANSPORT, LA.—Reports state that bids will be asked by the Texas & Louisiana Bridge Co. for constructing an iron highway bridge across Sabine River, main span 150 x 50 ft. and wooden approach 16 to 18 ft. wide. Total length of bridge, 730 ft. B. F. Haynes may be addressed.

ST. MARTINVILLE, LA.—Reports state that this city will soon construct an iron bridge across Bayou Teche. Albert Bienvenu may be addressed.

ATHENS, O.—Bids are asked until June 29, according to reports, for constructing two stone piers and abutments at Cook's Crossing in Rome township. W. F. Scott, County Audr.

EAST LIVERPOOL, O.—Local papers state that the street railway company will construct a new steel bridge across Jethro hollow this summer. Manager Hoefgen may be addressed.

SIDNEY, O.—Bids are asked until June 22 for constructing a 45-ft. hoist bridge across the canal at Newport. J. S. Laughlin, County Audr.

WARREN, O.—Chas. B. Shelby, County Audr., informs us that the Youngstown Bridge Co., Youngstown, O., was awarded, June 3, at $2,165, the contract for constructing the substructure of a 115-ft. bridge over Eagle Creek at Phalanx Mills. Bids are asked by the commissioners of Mercer county, Pa., and Trumbull county, O., until July 8 for constructing the superstructure of a 100-ft., high truss, bridge with an 18-ft. roadway and a 5-ft. sidewalk, over Pymatuning Creek, at Orangeville, Pa. Chas. B. Selby, County Audr.

EVANSVILLE, IND.—Fred Grote, Chn. Water-Works Trustees, informs us that the following bids were received June 11 for constructing a bridge across Bee Slough: Eigermann & Hollerbach, Evansville, $17,776; Bedford & Weikel, $23,619 and $24,535. The contract will probably be awarded to Eigermann & Hollerbach.

NEW ALBANY, IND.—Reports state that bids, ranging from $700 to $1,400, received for constructing an iron bridge over Falling Run at West Ninth St., have been rejected and new bids ordered.

EDWARDSBURG, MICH.—Reports state that the Bellefontaine Bridge & Iron Co., Bellefontaine, O., has been awarded the contract for constructing an iron bridge over Christian Creek, on Redfield St.

ANOKA, MINN.—Reports state that an election will be held July 24 to vote on the question of issuing $12,000 in bonds for constructing a new bridge over Rum River in this city.

BLUE EARTH CITY, MINN.—The following bids were opened June 2, by C. M. Sly, Chn. Bd. County Comrs., for constructing an iron bridge across Blue Earth River:

Milwaukee Bridge & Iron Wks., Milwaukee, Wis.	$4,200
Wisconsin Bridge & Iron Co., Milwaukee	4,687
B. F. Parks, Cedar Rapids, Ia	4,740
Clinton Bridge & Iron Works, Clinton, Ia	4,398
R. Sheely, Des Moines, Ia	4,955
A. H. Austin, Webster City, Ia	4,380
Chicago Bridge & Iron Co., Chicago (accepted)	3,649
Pittsburg Bridge Co., Pittsburg, Pa	4,532
J. B. Marsh, Des Moines, Ia	4,500

MINNEAPOLIS, MINN.—E. T. Abbott, County Surv., informs us that Fagan & Burnes have been awarded, at $475, the contract for painting five county bridges, with two coats of graphite. The bridges range from 130-ft. to 888-ft. in length.

ROSEAU, MINN.—The council will be petitioned to construct a bridge across the river at Pearl St., according to reports. Estimated cost, $500.

ST. PAUL, MINN.—The following bids were opened June 7 by W. F. Erwin, Clk. Bd. Pub. Wks., for constructing the superstructure of the Raymond Ave. bridge; bids for substructure were given last week:

Phoenix Bridge Co., Phoenixville, Pa	$30,843
Universal Construction Co., Chicago, Ill. (accepted)	26,490
Pittsburg Bridge Co., Pittsburg, Pa	29,059
American Bridge Co., Chicago, Ill	29,637
Massillon Bridge Co., Massillon, O	31,031
Youngstown Bridge Co., Youngstown, O	31,831
Edge Moor Bridge Co., Wilmington, Del	30,396
Wisconsin Bridge & Iron Co., Milwaukee, Wis	29,852
Milwaukee Bridge & Iron Wks., Milwaukee, Wis.	28,935
Gillette & Herzog Mfg. Co., Minneapolis, Minn	32,733
Toledo Bridge Co., Toledo, O	33,915
Penn Bridge Co., Beaver Falls, Pa	31,719
New Jersey Steel & Iron Co., Trenton, N. J	36,539
Chicago Bridge & Iron Co., Chicago, Ill	32,316

KANSAS CITY, MO.—Local papers state that Henry A. Wise, Cy. Engr., is preparing plans for the proposed 24th St. viaduct. It will be about 1,800 ft. long and will cost about $30,000.

LEAVENWORTH, KAN.—Bids are asked until July 5 for constructing five wooden county bridges. J. W. Niehaus, County Clk.

FARGO, N. DAK.—Bids are asked until July 6 for constructing three pile bridges to be 65-ft., 130-ft. and 30-ft. long. O. J. Olson, County Audr.

MODESTO, CAL.—The Pacific Bridge Co. has been awarded at $39,300 the contract for constructing a steel bridge across Tuolumne River. Nine bids were received.

STRATFORD, ONT.—Bids are asked until June 29 for constructing a 48-ft. steel bridge with a 14-ft. roadway, near Fairview. John Corrie, Inspector.

BATHURST, N. B.—Reports state that plans are asked by the New Brunswick government for the proposed steel bridge with stone abutments, across the Big River.

COREA.—A press report states that the Universal Construction Co., Chicago, has been awarded the contract for constructing a 1,650-ft. bridge over the Hau River, and that the material for the bridge will be rolled by the Illinois Steel Co., Chicago., Ill.

BUILDINGS.

BRIMFIELD, MASS.—Bids are asked until June 15 for erecting a hotel and a stable at this place for the Brimfield Hotel Co. R. V. Sawin, Clk. Bd. Directors.

BOSTON, MASS.—Bids are asked until June 21 for removing portions of the old Boston & Maine station in Haymarket Square. Howard A. Carson, Ch. Engr., Boston Transit Com.

CHATHAM, MASS.—Bids are asked until June 21 for constructing a life-saving station at Nausett Beach, near this place, as stated in our advertising columns. S. I. Kimball, Gen. Supt. Life-Saving Service, Washington, D. C.

HOPEDALE, MASS.—It is reported that a new memorial church building, given by Eleen S. and Albert Draper, will soon be erected at a cost of $60,000.

LOWELL, MASS.—Bids are asked until June 29 by the county commissioners for the heating and ventilation of the additions to the court house in this city; also for the plastering, marble work, plumbing, electric wiring, carpenter's work, etc., of the same. Arch., Olin W. Cutter, 85 State St., Boston, Mass.

BROOKLYN, N. Y.—Plans have been prepared for A. W. Parker, for a new 7-story brick and terra cotta apartment building, to cost about $80,000. Arch., J. Graham Glover, 186 Remsen St.

BUFFALO, N. Y.—Reports state that bids will soon be asked for erecting the new armory for the 74th regiment, for which building the state legislature has appropriated $375,000. Arch., Isaac G. Terry, Albany, N. Y.

BUFFALO, N. Y.—Bids are asked until June 22 for erecting two new school buildings and for installing heating systems in school buildings Nos. 18 and 59. R. G. Parsons, Secy. Bd. Pub. Wks.

COHOES, N. Y.—A new opera house to cost about $35,000 is to be erected here for Samuel J. Benaon, according to reports.

HUDSON, N. Y.—The contract for erecting the new armory in this city has been awarded to J. J. Kelly at $30,268. Comrs., Adj. Gen. Chas. W. Tillinghast, Inspector-Gen. Edward M. Hoffman; Benj. Flagler, Ch. Ordnance; Arch., I. G. Perry, Albany and Binghamton, N. Y.

NEW YORK, N. Y.—Bids are asked until June 21 by the board of education, 585 Broadway, for erecting a new school building at Andrews and Burnside Aves., Morris Heights; also for supplying heating and ventilating apparatus for a new annex, and ventilating apparatus for main building of grammar school No. 13; also for making alterations, repairs, etc., at grammar schools Nos 14, 15, 19, 22, 36 and 71; also for making alterations, repairs, etc., at grammar schools Nos. 26, 33, 45, 48 and 56; also for making alterations, repairs, etc., at primary school No. 16.——Plans have been prepared for John Glass, Jr., owner and builder, 426 West 23d St., for a 6-story brick and stone stable at 221 to 225 West 17th St. Arch., G. A. Schellinger, 128 Broadway.——A brick and stone Jewish synagogue is to be erected for the Hand-in-Hand congregation of north New York on 145th St., near Brook Ave. Pres., William Daub, 700 East 145th St.; Vice-Pres., Isaac Piser, 623 East 144th St. Arch., Albert E. Davis, 2558 3d Ave.——Plans are being prepared for Thos. J. McGuire, 968 St. Nicholas Ave., for a 6-story apartment building on 83d St., near West End Ave., to cost $75,000. Arch., H. T. Howell, 784 East 138th St.——The following bids were opened by the dock department June 5, for the erection of a recreation structure on the pier at the foot of East 24th St.:

R. H. Hood, 26 Cortlandt St. (accepted)	$98,900
A. & P. Roberts, 100 Broadway	102,500
Augustus Smith, 39 Cortlandt St	102,500
Thos. Dwyer, Temple Court	109,547
Ritter & Conley, 39 Cortlandt St	111,000
Kelly & Kelley, St Paul Bldg	116,630
West Side Foundry Co., 50 Cliff St	121,100

NEW YORK, N. Y.—A fire on Ellis Island, June 15, destroyed the new immigration depot and adjacent buildings, causing a loss of about $500,000. The buildings will be rebuilt by the government.——The following bids were received June 16 by the fire department, 167 East 67th St., for constructing a fire-engine house at 33 West 43d St.:

E. D. Conolly & Sons, 156 East 62d St	$23,449
J. M. Phillips, 143 Liberty St	24,449
H. Probst, 160 5th Ave	24,546
Hartmann & Horgan, 253 East 68th St	25,679
P. Gallagher, 156 5th Ave	25,900
Alfred Nugent & Son, 41 Columbia St	26,835
Jas. O'Toole, 348 East 84th St	26,955
John Fury, 1684 2d Ave	27,300
Harry McNally, United Charities Bldg	27,522
Jennings & Welstead, 1762 Broadway	27,800
Kelly & Kelley, St. Paul Bldg	28,146
Jas. D. Murphy, 1181 Broadway	28,480

BOONTON, N. J.—Charles A. Norris, Pres. Bd. Education, informs us that the following contracts have been awarded for erecting the new school building, as advertised in Eng. News; Arch., Marinus Houman, Central Bldg., Paterson, N. J.; mason work, Goodwin & Parham, Paterson, N. J., $9,000; carpenter, N. C. Quackenbush, Paterson, N. J., $6,675; tinning and plumbing, D. A. Conklin, Boonton, $910; painting, William Sigel, Paterson, N. J., $469.

NEWARK, N. J.—Reports state that the Newark Diocesan Conference has decided to erect a new cathedral at 5th, 6th and Ridge Sts., and Clifton Ave., to cost about $1,500,000.

PATERSON, N. J.—Bids are asked until June 30 by the county board of freeholders, for the purchase of $100,000 worth of bonds, for the purpose of erecting a new court house. Chn., John Blauvelt; Clk., Arthur B. Pearce, Savings Institution Bldg., Paterson.

PHILADELPHIA, PA.—Bids are asked for erecting the new 3-story brick museum of science and art, for the University of Pennsylvania, on South St., near 33d St.; estimated cost, $500,000. Cope & Stewardson, 314 Walnut St.; F. Miles Day & Bro., 925 Chestnut St.; and Wilson Eyre, Jr., 927 Chestnut St., are joint architects of the building.

PITTSBURG, PA.—Reports state that plans are being prepared for a casino building to be erected in this city at a cost of about $150,000. Arch., J. D. Allen, 1017 Chestnut St., Philadelphia, Pa.

WASHINGTON, D. C.—Bids are asked until June 19 for constructing a life saving station on the Atlantic coast, opposite the Isle of Wight Bay, about 5 miles north of Ocean City, Md. S. I. Kimball, Gen. Supt. U. S. Life Saving Service, Washington.

FAIRMOUNT, W. VA.—The following bids were received June 10 for erecting a new court house in this city. Comr., T. L. Burchinal:

Hamilton Bros., Wheeling, W. Va	$148,650
G. W. L. Mayers, Fairmount, W. Va	143,485
Jas. Westwater & Co., Columbus, O	130,743

ATLANTA, GA.—A new 10-story office building is to be erected for W. D. Grant at Broad, Walton and Forsyth Sts. Archs., Bruce & Morgan, Grant Bldg.

BRUNSWICK, GA.—Bids are asked until Aug. 3 for erecting a new court house for which an appropriation of $40,000 has been made. J. C. Lehman, Clk. County Comrs.

McDONOUGH, GA. — Reports state that a new court house will soon be erected at this place.

JACKSONVILLE, FLA.—The state legislature has passed a bill which provides for the issuance of $75,000 in bonds for erecting new school buildings in Duval county.

LOUISVILLE, KY.—Plans have been prepared for a 2-story brick and stone school building to cost about $50,000. Arch., Mason Maury, 6th and Main Sts.

ATHENS, O.—Bids are asked until June 30 for the heating and ventilation of the Athens state hospital, by the fan system. Engr., H. D. Crane, 526 West Pearl St., Cincinnati, O.

CINCINNATI, O.—Bids are asked until July 5 for erecting a school building at Bremen and Findlay Sts. Jacob E. Cormany, Chn. Com.

JACKSON, MICH.—At a county election held on June 4 it was decided to borrow $15,000 for the purpose of erecting a circuit court house in the rear of the present county building.

PONTIAC, MICH.—Bids are asked until June 22 for erecting a new masonic temple. George Dickinson, Pres. Bd. Trustees; Archs., Fisher Bros.

CHICAGO, ILL.—It is reported that the directors of the House of the Good Shepherd, Orleans and Hill Sts., expect to sell their present home and to erect new buildings at North Clark and Grace Sts., at a cost of about $125,000.——Plans have been prepared for C. W. Hoff for a 3-story brick and stone apartment building at Wright and Maple Sts., to cost about $40,000. Archs., Simpson & Mueller.

CHICAGO, ILL.—Bids are asked by the board of education, 100 Randolph St., until June 18 for the masonry, structural iron, steam heating, etc., of an addition to the Ward school building at Shields Ave. and 27th St.; also until June 25 for repairing required at Sunday-school buildings. Arch., Normand S. Patton, 1117 Schiller Bldg.

MILWAUKEE, WIS.—Bids are asked until July 16 for the materials, labor, etc., required for the interior finish of the post-office building, as stated in our advertising columns. C. E. Kemfer, Acting Supervising Arch., Washington, D. C.

CORSICANA, TEX.—Bids are asked until June 17 for erecting a 2-story brick school building for the Orphan's Home at this place. Jink Evans, Pres. Bd. Trustees.

GATESVILLE, TEX.—Bids are asked until June 25 for erecting a stone court house at this place; bond, $2,000. T. C. Taylor, County Judge; W. C. Dodson, Arch., Waco, Tex.

FLANDREAU, S. DAK.—Bids are asked until June 24 for erecting two dormitory buildings, one dining hall, and electric wiring for the same on the government Indian school grounds at this place; estimated cost, $40,000.

HOT SPRINGS, ARK.—It is reported that the Great Northern Hotel will be enlarged and improved at a cost of about $30,000. Proprietor, G. S. Williamson.

EUGENE, ORE.—The county court is considering the advisability of erecting a new court house, according to reports.

WATER-WORKS.

AUBURN, ME.—F. E. Bisbee, Supt. Water-Works, writes us that the water mains will be extended 1½ miles, the work to be done by day labor.

BIDDEFORD, ME.—The council is considering the question of purchasing the works of the Biddeford & Saco Water Co. Alderman Murphy may be addressed.

DEERING, ME.—I. W. Barbour, Cy. Engr., Woodsford, Me., writes us that the city has received a proposition from the Standish Water Co., Portland, to furnish 30 additional hydrants. The extension of the company's mains through six miles of streets will be required. The proposition is now under consideration by the council. Geo. P. Wescott, Pres. Water Co.

HALLOWELL, ME.—G. A. Safford, Mayor, writes us that plans are not yet formulated for the proposed municipal works. The supply will be taken from springs.

KINGFIELD, ME.—The Kingfield Water Co. has been organized to put in works here by H. S. Wing, E. E. Jennings, A. G. Winter and others.

WHITEFIELD, N. H.—An election will be held June 17 to vote on the question of issuing $10,000 in bonds for extending the pipes to Carroll River for an increased water supply, according to reports.

BARRE, VT.—C. S. Currier, Cy. Engr., is reported to have completed surveys for an addition to the works of the Barre Water Co. A reservoir of 2,000,000 gallons capacity will be constructed. Gen. Mgr., C. S. Goodhue, Springfield, Mass.

CASTLETON, VT.—N. L. Clark, Town Clk., writes us that no work will be done on the proposed works this year; estimated cost, $15,000.

GLOUCESTER, MASS.—A commission has been appointed to fix upon the price to be paid by the city for the purchase of the works of the Gloucester Water Supply Co. E. P. Bumpus, Quincy, Mass., Jno. K. Freeman, Winchester, Mass., and J. E. Ellis, Woonsocket, R. I., compose the commission.

SHEFFIELD, MASS.—Plans are completed for the proposed water-works for the Sheffield Water Co.; estimated cost, $20,000. Secy., T. C. Wickwise.

SWAMPSCOT, MASS.—The committee has recommended to the town the appointment of a committee to secure the services of an expert for constructing municipal works; it is also recommended that $1,000 be appropriated for expenses. Chn., E. F. Small. A. F. Foster may be addressed.

WESTERLY, R. I.—This town has voted to authorize the council to offer the Westerly Water-Works Co. $175,000 for its plant. Louis W. Arnold and Walter Price may be addressed.

STAMFORD, CONN.—We are informed that plans and specifications for a new well and a change of pipes, etc., at the pumping station are completed. Des. Engr., Granville Scofield, Bridgeport, Conn.; Chas. E. Powell, Chn. Health and Sewer Dept.; W. B. Cochran, Cy. Engr.

LITTLE FALLS, N. Y.—The board of public works propose to construct for the proposed increased supply a filter chamber at Eaton dam and a pipe of 8,000,000 gallons capacity daily at Beaver Brook, a mile below Salisbury reservoir; estimated cost, $50,000. S. E. Babcock, Cy. Engr.

PITTSFORD, N. Y.—Bids are asked until July 2 for constructing works. Engr., Paul Voorhees, 1210 Guaranty Bldg., Buffalo, N. Y.; P. D. Carpenter, Pres. Comrs.

PORT LEYDEN, N. Y.—Bids are asked until July 7 for constructing water-works, to consist of pipes five miles long, etc. Henry Annable, Pres. Comrs.; Sydney S. Snell, Constructing Engr., Lowville, N. Y.

POTSDAM, N. Y.—H. P. Barnhart, Secy. Comrs., writes us that an election will be held July 10 to vote on the question of constructing additions to the works to cost about $80,000. The additions will include six miles of 14-in. cast iron pipe, three miles of 10-in. mains, a reservoir of 10,000,000 gallons capacity, etc. The source of the new supply will be from springs by gravity.

SODUS, N. Y.—The people of this place are reported as considering the question of works. Delevan Smalley, Engr., Syracuse, N. Y.

SOUTH NEW BERLIN, N. Y.—It is reported that this place is to have water-works soon.

WURTSBORO, N. Y.—Nicholas Cantine is reported as making surveys for works.

METUCHEN, N. J.—The people here have voted to make a contract with the Midland Water Co. to lay mains and furnish the town with water. T. A. Wood may be addressed.

ASBURY PARK, N. J.—Geo. Pfeiffer & Co., Camden, N. J., are reported to have been awarded the contract for constructing a new artesian well plant at West Asbury Park. A standpipe 150 ft. high and 12 miles of mains will be constructed.

WESTVILLE, N. J.—The township committee is reported to have granted Geo. Pfeiffer & Co., Camden, N. J., a franchise for works in this town.

GREENCASTLE, PA.—It is said that A. H. McNeal, Burlington, N. J., has purchased the works of the Consumers' Water Co. for $26,000.

ALTOONA, PA.—Bids are asked until June 30 for paving with stone a portion of the water channel, as stated in our advertising columns. C. A. Martin, Secy. Water Comrs.; H. K. M'Cauley, Pres.

BRADDOCK, PA.—The council has voted to issue $102,000 in bonds for constructing a reservoir this summer. Plans have been completed. The reservoir will be 500 × 240 ft. and 40 ft. deep. Wm. Howatt, Supt. Pub. Wks.

FREEDOM, PA.—Bids are asked until July 1 for constructing water-works, as described in our advertising columns. A. McDonald, Pres. Comrs.; J. P. Leaf, Des. Engr., Leaf Block, Rochester, Pa.

HATBORO, PA.—It is reported that the Hatboro Water Co. has obtained a 20-year franchise for supplying this place with water. The company proposes to absorb the Hollowell Electric Light Co. and make extensions to the old plant to cost about $25,000.

FREDERICA, DEL.—The construction of works at this place is proposed, according to reports.

LITTLESTOWN, PA.—Bolton G. Coon, Kingston, Pa., has been awarded the contract for building works for this place.

MIDDLETOWN, PA.—The plants of the Middletown Water Co. and of the Swatara Mill Co. are offered for sale June 21, subject to a mortgage of $25,000. J. F. Raymond, J. W. Rewalt and B. M. Mead, Assignees.

MORTON, PA.—We are informed that the American Pipe Mfg. Co., 112 North Broad St., Philadelphia, received 12 proposals June 4 for constructing near this place a 4,000,000 gallon distributing reservoir, as advertised in Engineering News. Ch. Engr., J. W. Ledoux, Philadelphia.

SPRINGFIELD, PA.—The Springfield Water Co. is reported to have purchased two acres of land from J. F. Bickel as a site for a new reservoir.

TAMAQUA, PA.—Samuel Beard, Town Clk., writes us that an election to vote on the question of an increase of $50,000 of the debt for improving the works will be held July 20.

ONANCOCK, VA.—Work is reported to have begun on the proposed plant to be built by E. S. York, Baltimore, Md. Councilman E. W. Robertson may be addressed.

PALATINE, W. VA.—King & Caveney, of Grafton, W. Va., have been awarded the contract for furnishing 3,350 ft. of 4-in. and 1,050 ft. of 3-in. cast-iron water pipe, valves, 10 hydrants, etc., at $963. The committee will soon ask for bids for laying the pipe, etc.

GOLDSBORO, N. C.—The council is considering the question of issuing bonds for the purchase of the works of the Goldsboro Water Co. Supt., H. P. Dortch.

SOUTHERN PINES, N. C.—Edward M. Grover, Mayor, writes us that the town has not yet decided upon any definite plans for works, noted in our issue of last week.

STATESVILLE, N. C.—The aldermen have employed J. L. Ludlow, of Winston, N. C., to prepare estimates and make survey for water-works and a sewer system for this place.

CHESTER, S. C.—Bids are asked until July 2 for constructing water-works and electric light plant and a sewer system, as described in our advertising columns. Jas. McLarnon, Secy. Comrs.; Pownall & Minshall, Engrs., 150 Nassau St., New York.——Bids are asked until June 21 for the purchase of $50,000 of 5% bonds for the above work.

FITZGERALD, GA.—It is reported that the council has rescinded the franchise granted in April to Sidney Lascelles, Fitzgerald, for water-works in this place, which was to have cost $35,000. Capt. R. I. Coverdale, Rome, Ga., is interested.

MACON, GA.—Local papers state that Judge Emory Speer has directed T. D. Tinsley, Receiver for the water-works, to lay larger mains and erect a new pumping station.

SAVANNAH, GA.—T. T. Johnson, Chicago, Ill., has recommended to the council the building of a flush pipe from the works. To secure a supply of about 15,000,000 gallons a day will cost about $14,500. Supt., H. M. Lofton.

EUFAULA, ALA.—It is said that the water committee wants addresses and catalogues of manufacturers of meters. The city will require about 300 meters of ¾ to 1 in. R. Ballowe, Chn. Com.; P. B. McKenzie, Mayor.

MAGNOLIA, MISS.—The Magnolia Gas Light & Water Co. has been granted a franchise for works, according to reports.

DAYTON, TENN.—The question of issuing $50,000 in bonds for works and for improving the streets is being considered.

HILL CITY, TENN.—It is reported that the early construction of works is being considered; estimated cost, $25,000. H. C. Beck, of the Chattanooga Co., Ltd., Chattanooga, Tenn., is interested.

ADAIRVILLE, KY.—A committee has been appointed to secure bids, etc., for constructing works, according to reports. F. G. Wake may be addressed.

ELYRIA, O.—Bids are asked until June 30 for the purchase of $200,000 of 4½% bonds for constructing the proposed city works, according to reports. C. H. Snow, Cy. Engr.; W. H. Park, Cy. Clk.

MINGO JUNCTION, O.—The question of constructing works for this place is being agitated by the "Advocate."

ARGOS, IND.—An election will be held June 25 to vote on the question of constructing works. V. E. Neff, Town Clk.

COLUMBIA CITY, IND.—Bids are asked by the City Clerk until July 14 for constructing a reservoir for the water-works. Supt., J. A. Ruch.

INDIANAPOLIS, IND.—W. H. Wheeler & Co., Beloit, Wis., have been awarded the contract for constructing works for the state prison to cost about $15,000, according to reports. An intake 2,800 ft. into the lake is to be built.

ELKTON, MICH.—Geo. Arthur, Clk., writes us that test wells have been sunk for the proposed supply. It is probable nothing more will be done before late in the fall.

SAGINAW, MICH.—Bids are asked until June 18 for furnishing 5,100 ft. of 6 and 10-in. cast iron water pipe. F. D. Keeler, Secy. Bd. Water Comrs.

NORMAL, ILL.—O. Seibert, Pres. Bd. Trustees, writes us that the J. L. White Co., of Chicago, has made a proposition to the trustees looking to the granting of a franchise for water-works.

STANFORD, ILL.—G. B. Larison writes us that the city is only sinking a deep well. At present water-works are not contemplated.

AUDUBON, IA.—It is reported that the council is considering plans for the proposed 140,000 gallon standpipe. Supt., E. J. Freeman.

DES MOINES, IA.—L. Higgins, Cy. Engr., writes us that prospecting for a new supply will be begun in a few days. Plans for the increased supply will be for a city of 200,000 people and 16,000,000 gallons daily. It is quite likely that slow sand filtration will be employed.

TRIPOLI, IA.—The construction of works is reported as being considered.

FOSSTON, MINN.—Bids are asked until July 5 for constructing works and an electric light plant to cost $13,000. Engr., C. F. Loweth, 94 E. 4th St., St. Paul; W. B. Sheffield, Village Recdr.

MABEL, MINN.—F. W. Bacon, Village Recdr., writes us that the following contracts were let June 3 for constructing works: Fairbanks, Morse & Co., St. Paul, Minn., tank, 18×30 ft., tower, 30 ft. high, engine and pump, 2,484 ft. of 6-in., 488 ft. of 4-in. cast-iron water pipe, 1,500 lbs. of special castings, seven hydrants, three 6-in. valves and boxes, one 12-HP. boiler, etc., all in place, $3,740; W. O. Cook, Canton, Minn., drilling well, $1.45 a ft.

LAWRENCE, KAN.—Fairbanks, Morse & Co., 1308 Union Ave., Kansas City, Mo., have been awarded the contract by the U. S. Government for constructing works at the Haskell Indian School, Lawrence.

HARVARD, NEB.—J. T. Fleming, Cy. Clk., writes us that no additions to the works are contemplated. When the plant was erected there was an indebtedness of about $5,000. The question is about to be submitted to the residents whether a levy of one-fifth of the amount for five years be imposed or 20-year bonds be issued. L. S. Martin, Water Comr.

JEFFERSON BARRACKS, MO.—Bids are asked until July 14 for constructing a pump house and furnishing the necessary pumping machinery for the barracks. Capt. J. T. Knight, A. Q. M.

MOUNT VERNON, MO.—We are informed that the following bids were received May 25 for constructing works:

Springfield Plumbing Co., Springfield, Mo.	$15,950
Rees Bros., Fayetteville, Ark.	15,000
W. D. Boyce & Co., St. Louis, Mo.	15,100
Fairbanks, Morse & Co., Kan. City, Mo., (accepted)	15,040

MARYSVILLE, MO.—The question of constructing municipal water-works and electric light plant is reported as under consideration by the Council. For further information see 1897 "Manual of Am. Water-Works."

LITTLETON, COLO.—Trustees Louthan and Bruner have been appointed a committee to confer with the Citizens' Water Co. with regard to it supplying the city with water, the franchise of the Littleton Water-Works Co. having been cancelled.

INDEPENDENCE, ORE.—A. J. Goodman, Mayor, writes us that the city contemplates the purchase of the water-works and the electric light plant now owned by L. C. Gilmore. There will be no extensions or new materials used.

ONTARIO, CAL.—The people of this place are reported to have voted May 31 against issuing $15,000 in bonds for increasing the supply. C. P. Morse, Pres. Bd. Trustees. Press reports state that the San Antonio Water Co. has purchased 200 acres of land in the canyon by which it proposes to increase the supply for this place.

VISALIA, CAL.—The council has been asked to submit the question of constructing municipal works to the voters. E. M. Jefferds, R. F. Roth and Henry Levinson may be addressed.

PARRSBORO, N. S.—Bids are asked until June 23 for the purchase of $40,000 of 4% water-works bonds. The contracts for constructing part of the works were awarded in May to McIntosh & McGregor, of Stellarton, N. S., and McManus & Davidson, N. S. N. H. Upham, Town Clk.

PARRSBORO, N. S.—Bids are asked until June 23 for constructing a reservoir. N. H. Upham, Town Treas.

SHERBROOKE, QUE.—The stockholders of the Sherbrooke Gas & Water Co. have agreed to dispose of their plant to the city at any time the council wishes to purchase it. The price will be agreed upon by arbitration. E. F. Waterhouse, Secy., and Councilman McManamy may be addressed.

CORNWALL, ONT.—The arbitrators of the water-works question have determined that the city must pay $86,492 for the works of the Cornwall Water-Works Co. Mayor Mulhern may be addressed.

REDICKVILLE, ONT.—It is reported that W. D. Taylor, of Maple Valley, Ont., is constructing works at this place for Lemuel Ostrander.

RENFREW, ONT.—This town will soon vote again on the question of issuing $53,000 in bonds for works and a sewer system. Des. Engr., Alex. Potter, 137 Broadway, New York; J. Clark, Clk.

SLOCAN, B. C.—It is reported that W. R. Clement, of West Slocan City, and P. Dickinson and J. Thomas, of Tacoma, Wash., propose to construct works and an electric light plant.

NELSON, B. C.—Bids are asked until June 28 for preparing plans, specifications, etc., for water-works and a sewer system. The designer of the accepted plan will receive $500. Chas. E. Seeley, Cy. Clk.

IRRIGATION.

STANDARD, FLA.—A. C. Firth, Standard, writes us that it is proposed to build an irrigation system for irrigating 10 acres of land on the Caloosahatchee River, Lee county. The land will be piped about every 40 ft. A sprinkler is required. A revolving nozzle will not answer the purpose. The pump capacity will be required to run at least a quarter of the plant at a time. The system will include a 10,000-gallon tank, a tower about 45 ft. high, a duplex pump of about 800 gallons a minute, a boiler, etc. The plant is to be completed by Jan. 1, 1898.

CHAMBERLAIN, S. DAK.—The governor has urged the counties to take advantage of the law recently passed providing for the construction of dams and reservoirs for storing water for irrigation purposes. Stacy Cochrane, Engr. of Irrigation, Chamberlain, may be addressed.

BILLINGS, MONT.—A canal 45 miles in length is proposed at this place for reclaiming the arid lands of the Billings bench.

DENVER, COLO.—The Colorado Land & Water Co. is making arrangements for the irrigation of Colorado lands by means of water to be taken from the Twin lakes in Lake county, to cost about $150,000. James A. Roberts, Controller, of New York, and Henry Koons, Buffalo, N. Y., and Brown Hotel, Denver, are stockholders.

PALOUSE, WASH.—The Palouse Land Co., which has recently been incorporated, will soon absorb all the rights of the old Palouse Irrigation Co., and will then rebuild the dam across the Palouse River and otherwise complete the irrigation system in this district. The following men are directors of the new company: Joshua S. Harris, Pres. Philadelphia & Reading R. R.; Samuel R. Shipley, Pres. Provident Life & Trust Co.; George Burnham, Baldwin Locomotive Works; Edward Lewis and Charles Hinchman, Philadelphia, Pa.; Joshua Peirce, Tacoma, Wash.

NEW COMPANIES.—Holland Ditch Co., Niwot, Colo.; $2,500; to operate a ditch constructed about May 1, taking water from Left Hand Creek, in Boulder county; Clemmens Knaus, Thomas Gavey, Samuel Williamson.

Coolidge Irrigation & Mfg. Co., of Coolidge, Kan.; $5,000; J. R. Reatly, V. T. Topscott, C. M. Stanley, W. E. Tarbox, T. B. Martin, all of Coolidge.

Center Union Canal & Irrigation Co., Provo, Utah; to irrigate 160,000 acres of land; Pres., F. F. Carter; Secy., W. M. Egan; Treas., T. Farley.

Law Reservoir Co., Black Hollow, Colo.; $2,500; to operate in Weld county; John E. Law.

Twin Lakes Reservoir Co., Denver, Colo.; $400,000; to operate in Lake, Chaffee, Fremont and Pueblo counties; Henry Keons, Buffalo, N. Y., James A. Roberts, New York, N. Y.; Andrew Caut, W. L. Hartman, E. C. Graham.

Santa Monica Land & Water Co., Santa Monica, Cal.; $1,000,000; Pres., C. H. Forbes; Vice-Pres., Roy Jones; Treas., Bank of Santa Monica; Secy. and Gen. Mgr., Robert F. Jones.

SEWERAGE.

BELFAST, ME.—Bids are asked until July 6 for constructing 1,000 ft. of pipe sewers in two streets. C. O. Poor, Chn. Com.

DEERING, ME.—We are informed that this city will build about a mile of pipe sewer this season at a cost of about $10,000. I. W. Barbour, Cy. Engr.

RANDOLPH, VT.—A committee has been appointed to investigate the advisability of constructing sewers. W. B. Viall and J. A. Fowler are members.

DEDHAM, MASS.—An election will be held June 23 to vote on the question of accepting the act authorizing the city to construct a sewer system. Nathaniel Smith, Cy. Engr.

EVERETT, MASS.—The question of constructing a system in that portion of the town known as Hendersonville is being considered. C. W. Mason, Cy. Engr.

WINTHROP, MASS.—The question of constructing sewers at a cost of about $21,700, is being considered. David Floyd may be addressed.

LAWRENCE, MASS.—Arrangements are being made for the construction of the second section of the Shanty Pond sewer. The extension will be about 500 ft. long and will cost about $15,000. A. D. Marble, Cy. Engr.

WOONSOCKET, R. I.—The council has been asked to make an appropriation of $18,000 for sewers in the northern section of the city. F. H. Mills, Cy. Engr.

HARTFORD, CONN.—The council received the following bids June 9 for constructing sewers; C. H. Bunce, Cy. Surv.:

	Wethersfield Ave., 1,200 ft.	Standish St., 2,000 ft.
P. H. Harrison & Son	$1,655	$2,755
James Campbell	2,015	3,097
A. H. McElwain	1,589	3,026
Hartford Paving & Con. Co.	1,953	3,383
M. H. Cadwell	2,845	4,873
Michael O'Neil	1,559	2,703
M. J. Pigott	1,471	2,837
Malcolm D. Pattison	2,142	3,637

STAMFORD, CONN.—Bids were asked until June 14 for sinking a well to provide water for condensing purposes in connection with the sewage pumping station. C. E. Rowell, Chn. Com.

COHOES, N. Y.—Bids are asked until July 6 for constructing a sewer tunnel, 9,000 ft. long, as described in our advertising columns. The tunnel will be in rock and earth, 6 ft. high and from 4 to 5 ft. wide. Engr., Edward Hayes, Cohoes; W. J. Elliot, Clk.

COXSACKIE, N. Y.—The sewer commissioners have engaged Engineer Chisim, of New York, to prepare plans for a system.

NEWARK, N. Y.—Bids were asked until June 15 for constructing a sewer in Willow Ave. C. P. H. Vary, Village Engr.

NEW ROCHELLE, N. Y.—It is stated that an election will be held July 7 to vote on the question of appropriating $65,000 for improvements to the sewer system. The voters will have the choice of disposal works, a pumping station or extending the system further into the Sound. J. K. Wilkes, Ch. Engr., Sewer Comrs.

NEW YORK, N. Y.—The following are the total bids received by the commissioner of street improvements June 5 for constructing sewers, the itemized bids for which were published last week:

	Farms Road.	Aqueduct Ave.
J. C. Rodgers	$374,644	....
M. J. Leahy	343,263	....
E. A. McQuade	397,593	$59,757
Thilemann & Smith	398,331	....
Norton & Dalton	434,905	52,621
S. W. Redmond	361,215	....
Cunningham & Kern	402,534	....
M. J. Dady	420,268	....
D. D. McBean & Co	394,455	....
W. F. Murray	....	54,997
J. S. Rogers	....	52,289

NEW YORK, N. Y.—Bids are asked by the commissioner of street improvements, Third Ave. and 177th St., until June 28 for constructing sewers in ten streets, and by the department of public works, 150 Nassau St., until June 28, for altering sewers in a number of streets.

SCHENECTADY, N. Y.—Petitions were presented to the council June 8 for sewers in Carrie St., Hamlin St. and about 600 ft. on Upper Albany St., aggregating 2,100 ft.; also for a surface sewer in Millard St. L. B. Sebring, Cy. Surv.

HOBOKEN, N. J.—Bids are asked until July 7 for constructing brick sewers in two streets and cleaning sewers in two other streets. M. V. McDermott, Cy. Clk.

NEWARK, N. J.—Bids are asked until June 17 for repairing the pumping machinery of the intercepting sewer at the station in Bay Ave. J. C. Mundy, Gen. Supt. of Wks.

DUQUESNE, PA.—An election will be held June 22 to vote on the question of issuing $40,000 in bonds for sewers and $85,000 for paving.

RANKIN, PA.—Bids were asked until June 15 for constructing 10,000 ft. of pipe sewers. J. S. Sheekey, Clk., informs us that the work will include 24 to 10-in. pipe sewers. Engrs., Trimble & Miller, 430 Fourth Ave., Pittsburg.

WILLIAMSPORT, PA.—Bids are asked until June 21 for constructing a storm sewer. J. J. Galbraith, Cy. Clk.; G. D. Snyder, Cy. Engr.

STATESVILLE, N. C.—J. L. Ludlow, Winston, N. C., has been engaged to prepare estimates, etc., for a sewer system and water-works.

CHESTER, S. C.—Bids are asked until July 2 for constructing a sewer system, water-works and an electric light plant, as described in our advertising columns. Bids are asked until June 21 for the purchase of $50,000 of 5% bonds for the above work. Engrs., Pownall & Minshall, 150 Nassau St., New York; Jas. McLarnon, Secy. Comrs.

BIRMINGHAM, ALA.—The city engineer has been directed by the council to ask for bids for constructing sewers in certain streets.

PADUCAH, KY.—Bids are asked until July 5 for constructing a sewer system, as stated in our advertising columns. D. A. Yeisen, Mayor; J. H. Wilcox, Cy. Engr.

BOWLING GREEN, O.—The committee is considering estimates and plans for the proposed system and disposal beds. An election will be held soon to vote on the question of issuing bonds for the work. C. W. Evers, Chn. Com.

CHILLICOTHE, O.—H. M. Redd, Cy. Engr., informs us that the following sewer work will probably be done this summer: About 1,500 ft. of 24-in. storm sewers; 1,700 ft. of 12-in. pipe; 500 ft. of 10-in. pipe and 2,500 ft. of 8-in. pipe; average cut, 10 ft.; estimated cost, $7,500. Des. Engr., John P. Force, Fostoria, O.

CLEVELAND, O.—Plans have been filed for sewers in seven streets. E. A. Roberts, Secy. Bd. of Control.

EAST PALESTINE, O.—S. W. Watkins, Cincinnati, is reported as preparing plans for a sewer system for the buildings at the county infirmary.

LIMA, O—Bids are asked until June 26 for constructing sewers in three streets. C. E. Lynch, Cy. Clk.

MARIETTA, O.—An election will be held June 28 to vote on the question of issuing $15,000 in bonds for sewers and paving, according to reports. Councilman Wood may be addressed.

DETROIT, MICH.—Bids are asked until June 18 for furnishing sewer pipe, sand and gravel for one year. John McVicar, Pres. Bd. Pub. Wks.

BLOOMINGTON, ILL.—The legislature has passed an appropriation of $6,000 as the state's share of a joint sewer for Normal and Bloomington, as the State Normal University would use it. Negotiations are now in progress between the two cities toward constructing the sewer, to cost about $25,000. Normal has given Bloomington permission to drain a street into Sugar Creek. Specifications are prepared. W. P. Butler, City Engr.

DES MOINES, IA.—Bids are asked until June 24 for constructing 411 ft. of 48-in. brick and 5,000 ft. of 18 to 12-in. pipe sewers. C. D. Boardman, Comr. Pub. Wks.

BOONVILLE, MO.—It is reported that the residents of this place have voted to put in sewers.

COLORADO CITY, COLO.—Bids were asked until June 15 for constructing 10,000 ft. of 12 to 6-in. pipe sewers, about 450 12 × 6 to 6 × 6-in. Y-branches, etc. A. L. Humphrey, Chn. Bd.

WARMSPRINGS, ORE.—Pugh & Gray, Salem, Ore., are reported to have been awarded the contract for constructing the proposed sewer system and water-works at this place for the U. S. government.

VALLEJO, CAL.—Bids are asked until July 7 for constructing about 3,000 ft. of 18 to 8-in. pipe sewers. C. F. Mugridge, Cy. Clk.

LONDON, ONT.—Bids are asked until June 24 for constructing 2,400 ft. of brick sewer. A. O. Graydon, Cy. Engr.; Willis Chipman, Consult. Engr., 103 Bay St., Toronto, Ont.

SAULT STE. MARIE, ONT.—The council has decided to construct a sewer in Queen St. Mayor Biggings may be addressed.

WINNIPEG, MAN.—The council has voted to construct a sewer in Osborne St., at a cost of about $4,000. C. J. Brown, Cy. Clk.

NELSON, B. C.—Bids for preparing plans and specifications for a sewer system and water-works are asked until June 28. The city will give $500 for the accepted plan. C. E. Seeley, Cy. Clk.

GARBAGE DISPOSAL—STREET CLEANING.

ALBANY, N. Y.—The board of health has approved the plans for the proposed garbage disposal crematory. Bids for furnishing and erecting the plant will soon be asked; surety, $48,000. Health Officer Balch and Commissioner Dyer may be addressed.

SYRACUSE, N. Y.—The East Side Business Men's Association has appointed James Carroll, Thos. Kendall and others a committee to investigate the question of garbage disposal in the east side of the city.

WASHINGTON, D. C.—Albert H. Daggett and Michael A. Dugan have been awarded the contract by the district commissioners for sweeping the streets by machine, except by the pick-up machine. The appropriation for cleaning this year is $140,000.

DAYTON, O.—The Woodland Cemetery Association is reported to have decided to construct a crematory on the cemetery grounds for the incineration of the dead.

INDIANAPOLIS, IND.—The council has ratified the contract of John R. McCarty, St. Louis, Mo., for removing the garbage from the houses of the city to the desiccating plant at Sellers Farm for a term of 10 years.

GRAND RAPIDS, MICH.—The council is considering the question of a location for the proposed garbage disposal plant. Councilman De Vries may be addressed.

CHICAGO, ILL.—Local papers state as follows: The plan of letting garbage contracts for ten day periods, inaugurated several months ago, has proved unsatisfactory, and the department of health has been deluged with complaints, so Commissioner L. E. McGann will soon advertise for bids for disposing of the garbage for one year. But this does not mean that the administration has abandoned the crematory idea. It is only that, pending arrangements for such a system, the garbage be removed satisfactorily. The dead dog nuisance has caused many complaints against the contractor, Henry McDonald. Dr. Reynolds, of the health department, threatens to take radical action. The street and alley department now promises to assign one wagon to every three wards to collect the carcasses at the city's expense and deliver them at certain locations. The contractor will be required to remove them from these locations twice a day.

STREETS AND ROADS.

HOLYOKE, MASS.—Bids are asked until June 25 for furnishing paving material, as described in our advertising columns. J. H. Newton, Chn. Com.; J. J. Kirkpatrick, Cy. Engr.

FRANKLIN, CONN.—At a special election held June 7 it was voted to purchase a new road machine.

HARTFORD, CONN.—The board of street commissioners on June 9 awarded the contract for paving Main St. with asphalt to the Southern New England Construction & Paving Co., Hartford. Charles H. Northam, Pres. Bd.

WATERBURY, CONN.—Bids were asked until June 16 for brick paving Bank St., from Washington Ave. to Porter St., also Harrison Alley, from Bank to Leavenworth St. R. A. Cairns, Cy. Engr.

ALBANY, N. Y.—T. Henry Dumery has been awarded the contract for paving Main Ave., from Madison to Western Ave., with brick, at $3,422; and for paving Yates St., from Knox St. to Lexington Ave., with brick, at $7,325.

AMSTERDAM, N. Y.—Bids are asked until June 22 for grading in Elizabeth St. and Florida Ave. Thomas J. Hazlett, Cy. Clk.

BINGHAMTON, N. Y.—Bids are asked until July 1 for paving Main St. and also Washington St., as stated in our advertising columns. Burr W. Mosher, Cy. Clk.

BROOKLYN, N. Y.—Bids are asked by the department of parks until June 24 for grading and macadamizing Fort Hamilton Ave., from 77th to 79th St. Comr., J. G. Dettmer; Secy., J. E. Smith.

BROOKLYN, N. Y.—Bids are asked until June 24 for relaying belgian blocks on 11th St., between 6th and 7th Aves.; also until June 28 for repaving Hanson Place, from Flatbush Ave. to Fulton St., with asphalt. Theo. B. Willis, Com. Cy. Wks.

GLEN COVE (L. I.), N. Y.—Plans for macadamizing the town roads have been accepted by the highway commissioners, and work upon the same will soon begin. W. H. Boyne, Engr., Glen Cove.

JAMESTOWN, N. Y.—Bids are asked until June 22 for furnishing the material and labor required in laying about 2,280 sq. yds. of brick paving, and 7,300 lin. ft. of curbing. A. A. Amidon, Pres. Bd. Pub. Wks.

LANSINGBURG, N. Y.—Bids are asked until July 1 for 62,000 sq. yds. of brick paving and 25,000 lin. ft. of curbing, as stated in our advertising columns. C. E. Hicks, Village Engr.; F. H. Miter, Clk.

OYSTER BAY (L. I.), N. Y.—At a meeting of the highway commissioners it was decided to use the $300,000, for which the town is bonded, for macadamizing the Hempstead town line to Messapequa, and West Main St., from South St. to the mill dam. Supervisor Samuel J. Underhill, Fred Herzog, Samuel J. Seamen and Samuel V. W. Fleet are interested.

NEW YORK, N. Y.—Bids are asked by the park commissioners until June 21 for 55,000 sq. ft. of asphalt paving and repaving of the walks in Central Park. Address Department of Public Parks, Arsenal Bldg., 64th St. and 5th Ave.

NEW YORK, N. Y.—Bids are asked until June 28 for paving with asphalt and stone pavement the carriageway of Park Ave., from 56th to 96th St.; for furnishing the department of public works with 13,000 lin. ft. of curb stone; also for grading, flagging, etc., in sundry streets. Chas. H. T. Collis, Comr. Pub. Wks.

ROCHESTER, N. Y.—The council is contemplating the paving of Court St., between St. Paul and Clinton Sts., with Medina block pavement; also the laying of curbs and new gutters. Edwin A. Fisher, Cy. Engr.

ROSLYN (L. I.), N. Y.—Bids are asked until June 21 for the purchase of $45,000 in bonds, for macadamizing North Hempstead roads. Samuel Hooper, Town Clk.

SCHENECTADY, N. Y.—Petitions were presented at the June meeting of the council for grading Corning St. and Stanley Place, and for curbing and flagging Van Vrankeen Ave.

CAMDEN, N. J.—Bids are asked until July 14 for constructing 11 miles of gravel road in Camden county, as stated in our advertising columns. E. T. Gill, Chn. Com.

HOBOKEN, N. J.—Bids are asked until July 7 for 44,100 sq. yds. of asphalt paving, and 38,500 sq. yds. of block pavement under asphalt, 18,600 lin. ft. of curbing, etc. M. V. McDermott, Cy. Clk.; Chas. A. Meyer, Engr.

JERSEY CITY, N. J.—Bids are asked until June 21 for about 6,000 sq. yds. of specification block, 4,300 sq. yds. of Belgian block, 4,440 sq. yds. of asphalt paving, and 6,200 lin. ft. of new curbing, etc., in three streets. Geo. T. Bouton, Clk. Bd.

MIDLAND PARK, N. J.—Bids are asked until June 21 for the purchase of $10,000 of 5% improvement bonds.

PARK RIDGE, N. J.—Bids are asked until June 21 for the purchase of $10,000 of 5% town improvement bonds. A. J. Ackerman, Borough Clk.

PATERSON, N. J.—Bids are asked until June 30 for macadamizing in Preakness Ave. William Whitmore, Engr. Passaic County; Edward N. Nevitt, Chn. Road Com.

WEST HOBOKEN, N. J.—Bids are asked until June 23 for grading, flagging, etc., Elm St., from Palisade Ave. to Clinton Ave., and Spring St. to Summit Ave. John P. McMahon, Town Clk.

WEST MILFORD, N. J.—Bids are asked until June 29 for grading and macadamizing that portion of the Paterson and Hamburgh Turnpike, in this town, from where the present macadam ends to the line dividing Passaic and Morris counties. William Whitmore, County Engr., Paterson, N. J.; Jacob J. Van Noordt, Director Bd. Chosen Freeholders, Passaic, N. J.

CURWENSVILLE, PA.—At a recent election it was decided to bond the town for $15,000 for street paving.

DALE, PA.—Bids are asked until June 24 for grading and paving Bedford St., from Faust's Alley to the borough line. S. G. Fetterman, Borough Engr., Woolf Block, Johnstown, Pa.

DUQUESNE, PA.—A special election will be held June 22 to consider the advisability of issuing $40,000 in bonds for sewer construction and $85,000 for paving. S. A. Taylor, Cy. Engr., 721 Whitney Ave., Wilkinsburg, Pa.

JOHNSTOWN, PA.—Bids were asked until June 15 for paving Cedar St. with cobblestone, and Vine and Conemaugh Sts. with brick; also for repairing the sidewalk on Iron St. with brick. E. L. Goldstein, Cy. Engr.

LOCK HAVEN, PA.—Bids are asked until June 23 for paving Main St., from Jay to Mill St. E. H. Welch, Cy. Engr.; S. M. McCormick, Cy. Clk., 132 East Water St.

MOUNT PLEASANT, PA.—The following bids have been received for about 6,000 sq. yds. of brick paving, with 4,500 ft. of curbing and 5,000 cu. yds. of excavation on West Main and South Church Sts.; J. J. Neel, Cy. Engr.:

H. C. Howard, Allegheny, Pa.	$10,380
Wier & McIntyre, McKeesport, Pa. (accepted)	8,645
James McConegly, Greensburg, Pa.	11,135
H. H. Penny & Co., Charleroi, Pa.	10,320
J. C. Spaith & Co., Pittsburg, Pa.	10,119
Funkhouser & Coats, New Brighton, Pa.	9,860
A. V. Purnell, Allegheny, Pa.	9,850
James McAfee & Co., Allegheny, Pa.	10,210
B. O'Connor, New Haven, Pa.	9,890
Jere. Lindsay, Mount Pleasant, Pa.	9,890
Miday & Milburn, Canton, O.	9,642
Sweeney & Houston, Pittsburg, Pa.	8,885
W. N. Porter, Scottdale, Pa.	10,215
John Hart, Mount Pleasant	10,215

PHILADELPHIA, PA.—Bids are asked until June 22 for regrading and brick repaving in several alleys. Theodore B. Stubbs, Health Officer.

RANKIN, PA.—J. S. Sheekey, Clk., informs us that the laying of 2,070 sq. yds. of brick paving is projected, at an estimated cost of 93 cts. a sq. yd.

READING, PA.—Bids are asked until June 28 by the board of public works, for paving Penn St., from Front St. to 11th St., with asphaltum, as stated in our advertising columns; bond, $10,000. S. S. Hoff, Cy. Engr.

YORK, PA.—The highway commissioners have awarded to William Witta the contract for improving West and Grantley Sts., at $2,350.

WASHINGTON, N. C.—Bids are asked until July 1 for grading and paving 1,125 lin. ft. of 30-ft. street, as stated in our advertising columns. Stephen C. Bragaw, Mayor.

ATLANTA, GA.—The street committee is contemplating laying Williams wood block paving on Pryor St., from the Aragon Hotel to Mitchell St., to cost about $15,000. R. M. Clayton, Cy. Engr.

CINCINNATI, O.—Bids are asked until June 30 for grading, curbing and brick paving of Dawson, Plymouth and Massachusetts Aves, and paving with bowlders of Dempsey St., from Western Ave. to Liddell St. August Herrmann, Pres. Bd. Administration; H. J. Stanley, Cy. Engr.

LIMA, O.—Bids are asked until July 7 for asphalt paving about one mile of West Market St., and about ¾ of a mile of brick paving on North Main St. and Harrison Ave.; also until July 12 for the purchase of bonds for the above work; viz., for West Market St., $66,500; for North Main St., $7,000; for Harrison Ave., $7,200. L. F. Prevost, Cy. Engr.

MARION, O.—Bids are asked until June 25 for improving Greenwood St., from Church St. to Quarry St. J. W. Scott, Cy. Engr.; James I. Beatty, Cy. Clk.

NILES, O.—Reports state that this city proposes to purchase a road roller. J. L. McDermott, Cy. Clk.

INDIANAPOLIS, IND.—The United States Silica Co. has been awarded the contract for repairing the asphalt and vulcanite pavements of the city during the coming year as follows: for skim coat, 85 cts. a sq. yd.; for resurfacing to foundation, $1.10 a sq. yd.; for new concrete foundation and asphalt surface, $1.90 a sq. yd. B. J. T. Jeup, Cy. Engr.

LOGANSPORT, IND.—The council has decided to pave Wall St., Broadway, from 3d to 7th St., and 3d St., from Broadway to the bridge over the Wabash River; also to lay cement sidewalks on 14th and 15th Sts. W. B. Ray, Cy. Engr.

WABASH, IND.—Bids are asked until June 28 for macadamizing on six streets, according to reports. Howe McGuire, Cy. Clk.

ANN ARBOR, MICH.—George F. Key, Cy. Engr., informs us that the state legislature has granted the city the right to issue $40,000 in paving bonds, and that the council is considering the ordinance necessary for issuing the same. It is not probable, however, that additional work will be done this year.

DETROIT, MICH.—Bids are asked until June 18 for 21,000 sq. yds. of cedar blocks, 12,399 sq. yds. of asphalt, and 12,000 sq. yds. of brick paving in four streets; also for the care of sundry asphalted streets, aggregating 210,000 sq. yds, until July 14, 1902. John McVicar, Pres. Bd. Pub. Wks.

SAULT STE. MARIE, MICH.—This city is said to be contemplating the issuance of $30,000 in bonds for paving sundry streets.

CHICAGO, ILL.—Bids are asked until June 18 for improving sundry streets in this city; bond, $1,000. L. E. McGann, Comr. Pub. Wks.

GALESBURG, ILL.—Bids are asked until June 21 for 10,705 sq. yds. of brick paving; the itemized bids recently received for this work are published under Contract Prices. M. J. Blending, Cy. Engr.

DES MOINES, IA.—Bids are asked until June 18 for grading the east approach of the 5th St. bridge over the Raccoon Fiver; also for 10,000 cu. yds. of embankment. L. Higgins, Cy. Engr.; John Sherman, Chn. Pub. Wks.

BUTTE, MONT.—The council has passed an ordinance authorizing the paving with fir blocks of Main St., from Quartz to Galena St.; Park St. and Broadway, from Montana to Arizona St.; Academy and Wyoming Sts. F. W. Blackford, Cy. Engr.

KANSAS CITY, MO.—Bids are asked until June 22 for laying gravel pavement on Indiana Ave., from 18th St. to the southern city limits; also for laying brick pavement on Wyandotte St., from 16th to 17th St. Henry A. Wise, Cy. Engr.—Bids are asked until June 10 by the county court for macadamizing and grading three miles of the Lee's Summit and Lone Jack Road; for constructing drains on 2½ miles of the Lee's Summit, Independence and Woods Chapel Road; also for constructing a stone arch culvert across Arlington Ave., between the Independence Road and the Missouri Pacific R. R. tracks. Thomas F. Callahan, County Surveyor.

ST. LOUIS, MO.—Bids are asked by the board of public improvements until June 25 for grading, paving and curbing in sundry streets. Pres., Robt. E. McMath; Secy., Emory S. Foster.

LOS ANGELES, CAL.—The council has decided to grade and otherwise improve Joberman and other streets. Chas. S. Compton, Cy. Engr.; John H. Drain, Supt. Sts.

OAKLAND, CAL.—The council has decided to re-macadamize 17th St., from Clay to Grove St. M. K. Miller, Supt. Sts.; R. M. Clement, Cy. Engr.

TORONTO, ONT.—It is reported that E. H. Keating, Cy. Engr., has recommended that brick sidewalks be laid on a number of streets, and that sundry streets be paved with asphalt, cedar blocks, gravel and brick.

MANUFACTURING PLANTS.

CHARLEROI, PA.—Reports state that Bamford Bros., silk manufacturers, of Paterson, N. J., have bought seven acres of ground at this place upon which they will erect a new silk mill to employ about 800 hands.

HOLLIDAYSBURG, PA.—The Hollidaysburg Iron & Nail Co. is reported to be making preparations to add a steel plant to its works, and also for erecting a new tin plate plant at West Newton, Pa.

NEW KENSINGTON, PA.—The Glenn Driller Co., New Brighton, Pa., expects to move to this place, where it will erect a plant for the manufacture of oil well drillers.

READING, PA.—Reports state that a new brick building, 33 × 120 ft., will be added to the plant of the National Brass & Iron Works, of this city.

LEXINGTON, N. C.—Reports state that W. A. Watson proposes to erect a cotton mill at this place.

COLUMBUS, GA.—The Georgia Mfg. Co. will erect a new clothing factory in this city, to include the factory proper, 100 × 200 ft., a 2-story office building, 50 × 250 ft., and a boiler plant.

SAVANNAH, GA.—A fire in this city damaged the plant of the Chatham Machine Brick Mfg. Co., causing a reported loss of $10,000.

ENSLEY, ALA.—It is reported that the Semet-Solvey Co., Syracuse, N. Y., will erect 60 by-product coke ovens in this place in connection with the works of the Tennessee Coal, Iron & Ry. Co.; estimated cost, $200,000. R. M. Atwater, Secy., Syracuse, N. Y.

EMBREEVILLE, TENN.—Reports state that the Embreeville Furnace Co. will construct two new blast furnaces of 100 tons capacity.

CINCINNATI, O.—It is expected that the Edison Electric Light Co. will commence work on its new plant on 8th St. about July 1. J. I. Beggs, Gen. Mgr.

MILLERSBURG, O.—Reports state that the Brightman Mfg. Co., manufacturers of turned, rolled, and polished shafting and shafting machinery, contemplate erecting several buildings, to be used as a shafting department and foundry.

MARTINSVILLE, IND.—A new brick plant, to cost about $30,000, is to be erected here by the Lamastigue Construction Co., in which Mr. McNernan, of Indianapolis, is interested.

CARLINVILLE, ILL.—A fire in this city, on June 11, destroyed the flour mill of the St. Louis Milling Co., besides several adjacent buildings. Reported loss, $200,000; insurance, $75,000.

SEATTLE, WASH.—It is reported that William Selover, of Portland, Ore., and others will soon erect a 400-ton smelter in this city, to cost $275,000.

BRANTFORD, ONT.—The Gould Coupler Co., Buffalo, N. Y., contemplates the erection of a plant in this city for the manufacture of its patented devices.

GAS PLANTS.

LONACONING, MD.—Reports state that this city has closed a contract with the electric light company for street lighting. The council had granted a franchise for the erection of a gas plant, and awarded a five-year contract for street lighting to Duncan R. Sloan and Isaac Bradburn, who have now relinquished same, the electric light company having accepted the offer of the council.

NEWPORT NEWS, VA.—The council is said to have granted a franchise for a gas plant to the Newport News Gas Co. The company was required to deposit $5,000 as a guarantee that work on the plant should commence in 90 days and be completed in six months.

RICHMOND, VA.—The board of directors of the Richmond chamber of commerce is said to be considering a proposition submitted June 10, by Wm. J. Payne, to establish a gas plant here at an estimated cost of $400,000.

CARTERSVILLE, GA.—This city has decided to construct a municipal gas plant and has withdrawn the offer made the Cartersville Light & Power Co. for the purchase of its property. A. B. Cunyus may be addressed.

LOCKLAND, O.—A press report states that the Fort Wayne Gas & Fuel Co. has been granted a 25-year franchise and will immediately begin the construction of a gas plant.

ALEXANDRIA, IND.—Reports state that the Indianapolis Oil Co., headed by Mayor C. T. Doxey, leased, June 10, 2,635 vacant lots in this city from the Alexandria Land Co., for oil purposes, the consideration being one-half interest in all oil that may be produced. The contracts require that 50 wells be drilled at once. A well has been shot on the Carver property in the center of the town, which will, it is thought, run fully 800 bbls. a day before it stops gaining.

DETROIT, MICH.—The Detroit Gas Co. has decided to extend its pipe line 20 miles this season, according to reports. Pres., E. T. Lynch.

SPRINGFIELD, ILL.—The Provident Gas Co., which was granted a charter about two years ago, will begin at once the laying of mains, according to reports.

NEW COMPANIES.—Fulton & Oswego Falls Gas Co., Fulton, N. Y.; $45,000 to supply gas to Fulton, Oswego Falls, Volney and Granby; Geo. A. Edwards, Syracuse, Thos. D. Lewis, Jonathan H. Case, Fulton. Flushing Gas & Electric Light Co., Flushing (L. I.), N. Y.; $300,000; Charles Whitehead, Fred J. Witt and B. Franklin De Freee, of New York city.

Home Gas Co., Ceres, N. Y.; $10,000; to mine and drill for petroleum and natural gas. L. C. Carrier, J. P. Herrick, C. B. Robarts, H. R. Smith and L. A. White.

Mud Creek Oil & Gas Co., Randolph, N. Y.; $1,000; John I. Gilberds, Ashton M. Parks, Horace French, Joseph Hazard and G. E. Adams.

The Manhattan Gas Lamp Co., New York, N. Y.; $10,000. Morris Kaempfer, Jacob Liberman and Jacob C. Kaempfer.

Metropolitan Light, Heat & Power Co., Parsons, Kan.; to supply gas for light, heat and power purposes; F. F. Lamb, F. R. Plance, J. H. Galvin, H. W. Drew, L. Brandenburg.

MISCELLANEOUS CONTRACTS.

CANAL.—Bakersfield, Cal.—The Kern River Power Co. on June 9 began final surveys of its proposed canal line.

FOUNTAIN.—Pittsburg, Pa.—Bids are asked by Edward W. Bigelow, Dir. Pub. Wks., for furnishing and erecting a fountain to cost $500.

PARK.—Cohoes, N. Y.—The question of converting the old cemetery into a park is being considered by the public improvement commission.

FIRE APPARATUS—Duluth, Minn.—Bids are asked by the fire commissioners until June 19 for furnishing 3,000 ft. of 2½-in. fire hose. Henry Truelson, Jr., Secy.

WHARF.—Stockton, Cal.—Bids are asked by the California Transportation Co. until July 7 for constructing a wharf, etc., on the Mokelumne River. Secy., N. Anderson.

CLOCK AND BELL.—Lancaster, O.—Bids are asked until June 28 for furnishing a clock of 8½ ft. in diameter and a bell weighing 4,500 lbs., according to reports. H. T. Mechling, Cy. Clk.

TUNNEL.—Arrowhead, Cal.—The Arrowhead Reservoir Co., Jas. D. Schuyler, C. E., is to make extensive improvements in its plant this year with certain tunnel contracts soon to be advertised.

FIRE ESCAPE.—Philadelphia, Pa.—Bids are asked until June 22 for furnishing and erecting a fire escape from the third story of the kitchen building of the pavilion hospital. J. J. McCay, Ch. Clk.

REPAIRING PIER.—Frankfort Harbor, Mich.—Bids are asked until June 25 for repairing about 963 ft. of pier, as stated in our advertising columns. Capt. C. McD. Townsend, Grand Rapids, Mich.

PARK WORK.—Kansas City, Mo.—It is stated by local papers that an addition of 120 acres is to be made to the park. Considerable work will be done to put it in order. Geo. E. Kessler, Engr. Park Bd.

TAIL-RACE.—Chicago, Ill.—Local papers state that bids are asked by the drainage board for constructing a tail-race at the controlling works about half a mile west of Lockport; estimated cost, $600,000.

STONE, CEMENT, ETC.—Washington, D. C.—Bids are asked until July 6 for furnishing riprap stone, sand, cement, etc., as stated in our advertising columns. Lt.-Col. C. J. Allen, U. S. Engr., Washington.

CANAL.—Portland, Ore.—Bids are asked by Wm. Smith, Secy., 34 Northeast 13th St., Portland, for constructing a canal. The work will require the removal of 95,000 cu. yds. of earth and 5,000 cu. yds. of rock.

STEAM SHOVELS.—Meadows, Fla.—We are informed that the Meadows Land & Improvement Co. will purchase or hire five or six steam shovels or dredges in the next two months for completion of some land drainage. J. W. Paine, Gen. Mgr.

CONDUIT.—Buffalo, N. Y.—Wm. Schumacher submitted the lowest bid received by the Secretary of the Buffalo State Hospital Austin Bldg., for constructing a brick conduit 9 ft. high and 1,000 ft. long, at $9,000. There will be required about 550,000 brick.

SURVEY.—Birmingham, Ala.—Congress has passed the bill appropriating $20,000 for a survey for the proposed Warrior Canal. The bill will no doubt be signed by the President. It is stated that the survey will be begun in July. J. A. Van Hoose, Birmingham, is interested.

VAULTS, SAFES AND BANK FURNITURE.—Kinston, N. C.—Chas. F. Dunn and associates, all negroes, will establish a savings bank at this place for the accommodation of their race, to be known as the Dime Savings Bank, and will contract for safes, vault, bank furniture, etc.

STEEL TOWER.—Montreal, Que.—Francis Lapointe, Arch., 749 West Taylor St., Chicago, Ill., has asked the city to grant him land for 30 years on the summit of Mount Royal, on which he proposes to erect a steel tower. The tower is to be about 600 ft. high and to cost about $400,000.

TUNNEL AND RAILWAY.—San Juan County, Colo.—The Gold Tunnel & Ry. Co. is about to start work on a tunnel to cut Kendall mountain, exposing the ore bodies of Deer Park and other veins at depths from 1,800 to 3,500 ft. The incorporators are: H. J. Mayham, W. H. Bush, W. C. Amos, and H. S. Shaw. Gen. Mgr., B. F. Kelly.

LEVEE, PUMPING PLANT, ETC.—Albany, Ill.—Bids are asked until June 25 for constructing two levees, to include about 135,000 cu. yds. of earthwork; culvert gates, piling, etc., to include 6,000 ft. of piling, 60 tons of 48-in. cast iron pipe, 120 cu. yds. of masonry, etc.; a pumping plant of about 40,000 gallons per minute, etc. E. L. Bigelow, Pres. Comrs., Albany; G. H. Todd, Secy., Aurora, Ill.

DITCH.—Kankakee, Ill.—Jno. K. Croswell, Kankakee, informs us that the following submitted bids June 7 for constructing 12½ miles of ditch, the prices being in the order of the names; the first was the lowest bidder: Robt. W. Lysle, Tiffin, O.; A. V. Wills & Sons, Pittsfield, Ill.; John J. Shea; John McAndrews, Bradley, Ill.; Pollard, Goff & Co., Champaign, Ill.; Chas. R. Lewis, and J. O. Wright.

PLACING ELECTRIC WIRES UNDERGROUND.—New York, N. Y.—The following bids were opened by the fire department June 16 for furnishing and placing fire alarm electrical conductors underground: Western Electric Co., Thames St., $67,597 for paper insulation, $68,599 for cotton insulation; Standard Underground Cable Co., Telephone Bldg., $49,968 for fibre insulation, $51,675 for rubber, $48,492 for paper; Safety Insulated Wire & Cable Co., 234 West 29th St., $55,897, no insulation specified.

MODEL TANK.—Washington, D. C.—The following bids were received by the navy department June 7 for constructing an experimental model tank and building, 50 × 500 ft., at the Washington navy yard, for which there is an appropriation of $100,000:

Washington Asphalt Block & Tile Co., Washington	$66,000
John Jacoby, Wilmington, Del.	56,000
James J. Ryan, 1126 N. 40th St., Philadelphia	61,800
Andrew Gleason, Washington	54,328
Wm. Rothwell, Washington	59,323
Daniel F. Mockabee, Washington	59,884
National Contracting Co., 18 Le Droit Bldg., N. Y.	50,932
Baldwin & Peake, Washington	53,158
Cranford Paving Co., Washington	61,000
John C. Robinson, 175 Dearborn St., Chicago	65,900
Kelly & Kelly, 265 Hancock St., Brooklyn, N. Y.	51,730
Houston Construction Co., 250 Bullitt Bldg., Phila.	83,803
Penn Bridge Co., Beaver Falls, Pa.	50,000
John T. Pettyjohn & Co., Lynchburg, Va.	58,800
James L. Parsons, Washington	67,852

CONTRACT PRICES.

BRIDGE MASONRY.—Mercer, Pa.—Geo. E. Hamilton, Clk., County Comrs., informs us that the following contracts were awarded June 8 for masonry for bridges:

Contractor.	Location bridge.	Price, a perch.
W. S. Eckenrode	Sharon	$4.60
Wm. McIntyre & Sons	Pymatuning township	3.27
W. T. Patton	Coolspring township	3.74
W. A. Boyd	Green township	3.45
George Patton	Worth township	3.30
Samuel M. Lightner	New Vernon township	2.44
John Gilchrist	Pymatuning township	2.95

WATER MAINS.—New York, N. Y.—The following bids were opened June 14 for laying water mains in about 15 streets:

Bids for Constructing Water Mains at New York, Opened June 14, 1897.

Quantities.		James Sheridan, Brooklyn.	Martin Lipps, 2558 3d Ave.	S. Forshay, New York.	M. J. Dady, Brooklyn.	John Cornwell, Jr., 69 E. 127th St.
Rock excavation	1,700 cu. yds.	$2.83	$0.37	$3.00	$2.50	$0.33
Earth excavation	13,000 " "	.33	.37	.35	.27	.33
Filling	14,000 " "	.07	.37	.25	.13	.33
36-in. pipe, to lay	1,100 lin. ft.	.83	.75	1.04	.75	1.00
20-in. " " "	400 " "	.60	.40	.82	.40	.40
12-in. " " "	8,000 " "	.24	.20	.45	.40	.29
6-in. " " "	15,000 " "	.21	.15	.32	.20	.18
36-in. stop cock and gear, to set	1	75.00	50.00	125.00	50.00	80.00
20-in. " " " " " "	1	54.00	20.00	110.00	30.00	40.00
12-in. " " " " " "	10	7.00	5.00	8.00	10.00	8.00
6-in. " " " " " "	45	4.00	4.00	5.00	7.00	6.00
Double nozzle hydrants to set	60	10.00	7.00	5.00	7.00	12.00
Pavement and flagging to relay	1,800 sq. yds.	.25	.01	.27	.05	.10
Granite pavement	500 " "	1.20	.01	2.00	1.25	.10
Telford macadam	2,700 " "	.63	.01	1.06	1.35	.10
Curb and gutter reset	200 lin. ft.	.05	.01	.15	.10	.01
Masonry	40 cu. yds.	9.00	10.00	9.50	12.00	.01
Blowoffs	2	30.00	5.00	20.00	40.00	15.00
Total		$20,464	$16,636	$28,660	$22,620	$17,473

WATER MAINS.—New York, N. Y.—The following bids were opened by the department of public works June 14 for furnishing and laying water mains in Sedgwick and Cedar Aves.:

Bids Received for Furnishing, Delivering and Laying Water Mains in New York, June 14, 1897.

Quantities.		Norton & Dalton, 147 E. 125th St., New York.	M. J. Dady, Brooklyn, N. Y.	Jas. Sheridan, Brooklyn, N. Y.	E. Shanley, New York.	M. Lipps, 2558 3d Ave., New York.	Geo. Clarke, New York.	John Cornwell, Jr., 69 E. 127th St., New York.	F. Thielmann, Jr., 147 E. 125th St., New York.
Excavation: Rock	1,000 cu. yds.	$3.00	$2.50	$2.75	$1.75	$0.23	$0.50	$0.10	$0.50
Earth	7,000 " "	.20	.27	.29	.22	.23	.50	.10	.50
Filling	7,000 " "	.10	.13	.16	.10	.23	.01	.01	...
Straight pipe	750 tons	17.50	20.00	18.25	17.50	17.50	18.00	22.00	17.00
Branches and castings	40 "	43.00	50.00	43.00	40.00	40.00	38.00	28.00	40.00
20-in. pipe to lay	8,000 lin. ft.	.60	.40	.53	.40	.40	.45	.40	.30
12-in. " " "	100 " "	.25	.40	.28	.20	.25	.35	.30	.30
6-in. " " "	250 " "	.18	.40	.21	.15	.15	.30	.20	.30
20-in. stop cock and gearing to set	2	15.00	30.00	52.00	6.00	20.00	20.00	60.00	20.00
12-in. stop cock and box, to set	1	5.00	20.00	30.00	3.00	5.00	10.00	10.00	6.00
6-in. " " " " " "	13	5.00	10.00	7.00	2.00	4.00	5.00	6.00	5.00
Double nozzle hydrants to set	8	5.00	7.00	7.00	6.00	7.00	6.00	12.00	5.00
Macadam and flagging to relay	1,500 sq. yds.	.60	1.00	.63	.25	.30	.60	1.00	2.00
Brick masonry	20 cu. yds.	10.00	12.00	11.00	10.00	10.00	12.00	.01	10.00
Blow-offs to set	2	5.00	40.00	35.00	5.00	5.00	10.00	20.00	10.00
Total		$26,065	$27,726	$27,144	$22,647	$22,251	$24,123	$23,614	$24,226

WATER PIPE.—Minneapolis, Minn.—The following bids were received June 11 for furnishing water pipe, as advertised in Engineering News: Furnishing and laying (all complete with cast iron)—Winston Bros., Minneapolis, $477,500; with steel—T. A. Gillespie Co., Pittsburg, Pa., $369,830; using steel pipes for submerged line, $359,086; or using cast-steel special castings and steel pipes, $340,726; cast-iron pipe, 6 to 48-in., 11,290 net tons—Howard-Harrison and Dennis Long & Co., $18.85; Ohio Pipe Co., Columbus, O., $16.83 (part only); Addyston Pipe & Steel Co., Cincinnati, O., $20 (part only); 50-in. steel pipe, 11,741 ft. 5-16-in. thickness, 11,914 ft. ⅜-in. thick, 7,157 ft. 7-16-in. thick, respectively—T. A. Gillespie Co., $4.44, $5, $5.61 a lin. ft.; Gillett-Herzog Mfg. Co., Minneapolis, $4.64, $5.44, $6.10; Riter & Conley, Pittsburg, Pa., $4.11, $4.94, $5.50; Carroll-Porter Boiler & Tank Co., Pittsburg, Pa., $4.30, $4.80, $5.30; Lintges, Connells & Co., Minneapolis, $4.57, $5.26, $5.79; 1,080 tons, 36-in. cast-iron pipe, flexible joints—Howard-Harrison and Dennis Long & Co., $47.50; R. D. Wood & Co., Philadelphia, Pa., $29; 468 tons special castings for cast-iron pipe—Howard-Harrison and Dennis Long & Co., $55; R. D. Wood & Co., $52; Russell Wheel & Foundry Co., Detroit, Mich., $79.50; 401 tons specials for steel pipe—Howard-Harrison and Dennis Long & Co., $70; R. D. Wood & Co., $72; Russell Wheel & Foundry Co., $79.50; 1,210 tons cast-iron pipe, 6 to 48-in., to be used in connection with 50-in. steel pipe—Howard-Harrison and Dennis Long & Co., $20; lump bids—gates for 48-in. cast-iron pipe, gates for 50-in. steel pipe, respectively—Gardner, Campbell & Sons, Milwaukee, Wis., $14,652, $14,986; R. D. Wood & Co., $16,600, $18,450:

Items.		Rensselaer Mfg. Co., Troy, N. Y.	Mich. Brass & Iron Wks., Detroit, Mich.	Eddy Valve Co., Waterford, N. Y.	Chapman Valve Mfg. Co., Indian Orchard, Mass.
Gates for 48-in. c.					
t. pipe: 4-in.	6	$7.20	$6.50	$7.00	$5.49
6-in.	33	11.50	11.00	11.11	8.57
8-in.	4	17.25	16.00	16.97	13.45
12-in.	5	31.75	29.50	31.40	27.61
16-in.	3	63.50	64.00	61.11	57.96
12-in. bypass	10	1,320.00	1,450.00	1,275.00	953.31
Indicators	9	75.00	75.00	65.00	.....
Gates for:					
24-in., 6-in. byps	2	195.00	203.00	193.00	160.83
30-in., 6-in. "	1	315.00	320.00	320.00	313.90
36-in., 8-in. "	8	533.90	575.00	540.00	436.33
Gates for 50-in. steel pipe:					
4-in.	6	.....	6.50	7.00	5.49
6-in.	33	.....	11.00	11.11	8.57
8-in.	4	.....	16.00	16.97	13.45
12-in.	5	.....	29.50	31.40	27.61
16-in.	3	.....	64.00	61.11	57.96
Indicators	10	75.00	75.00	65.00	.....
Gates for:					
24-in., 6-in. byps	2	.....	203.00	193.00	160.83
30-in., 6-in. "	1	.....	320.00	320.00	313.90
36-in., 8-in. "	8	.....	575.00	540.00	436.33
48-in., 12-in. "	1	.....	1,450.00	1,275.00	953.31
50-in., 12-in. "	9	1,950.00	1,825.00	[1] 1,800.00	[2] 1,053.31

[1] 9 gates, 48 to 50-in., at $1,500 each. [2] 9 gates, 48 to 50-in., at $953.31 each.

BRICK AND BRICK PAVING.—Hagerstown, Md.—The following bids were received by the council June 8 for brick paving: Hanna & Reilly, Chester, Pa., Savage iron shale brick, $1.58 a sq. yd.; construction alone, 68 cts.; Owen Paterson, Baltimore, Md., Clearfield brick, $1.67; same for block; on Pinegrove brick, $1.62; Savage, $1.67; block, $1.80; Mack block, $1.85; Porter, $1.78; Jas. McCloud, Williamsport, Pa., Mack wire cut, $1.29; repressed, $1.37; block, $1.41; E. G. Buck, Bedford City, Va., $1.29; construction only, 54 cts.; John Clarkson, Canton, O., Mack wire cut, $1.19; Mack repressed, $1.30; block Mack, $1.34; Porter brick, repressed, $1.35½; construction only, 47 cts.; hauling brick from station, 4 cts. a yd. Furnishing brick: McMahon & Porter Co., New Cumberland, W. Va., Standard, 76 cts.; repressed, 83 cts., f. o. b. cars Hagerstown, a sq. yd.; Mack Mfg. Co., Pittsburg, Pa., wire cut, 70 cts.; repressed, 80 cts.; block, 84 cts., f. o. b. cars Hagerstown.

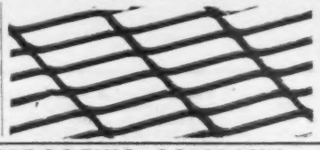
RETAINING WALL.—Cincinnati, O.—We are informed that the following bids were received by A. P. Butterfield, Clk. Bd. Administration, June 9, for rebuilding portion of the retaining wall on Bond St.:

Bidder.	Excavating, 800 cu. yds.	Masonry, 444 cu. yds.	Total.
J. McDonald	$0.43	$3.20	$1,768
P. Gleason	.35	3.75	1,930
H. Suer	.01	5.15	2,274
A. Desch	.01	4.95	2,186
T. Maloney (accepted)	.49	2.49	1,488
J. Molloy & Sons	.40	2.90	1,596
R. Aufderheider	.90	3.60	2,304

ASPHALT PAVING.—Allegheny, Pa.—The following contract has been awarded to Booth & Flinn, Ltd., for sheet asphalt paving in Parkway: 1,300 cu. yds. exca-

EXPANDED METAL.

PITTSBURGH, 531 Wood Street.
NEW YORK, 256 Broadway.



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OF NEW YORK,

No. 120 Liberty Street.

U. S. ENGINEER OFFICE, Oswego, N. Y., May 22, 1897.—Sealed proposals for SLOPING, GRADING, AND FURNISHING BRUSH AND STONE FOR PROTECTING BANK OF NIAGARA RIVER, at Fort Niagara, N. Y., will be received here until noon June 22, 1897, and then publicly opened. Information furnished upon application. W. S. STANTON, Maj. Engrs. 21-4t

Other Proposals, Pages XXIV & XXVI.

WATER-WORKS.

NYACK, N. Y.

Sealed proposals will be received by the Board of Water Commissioners, of the Village of Nyack, N. Y., until 2 p. m. of Thursday, June 24, 1897, for furnishing labor and materials for the completion of a water-works system for said village.

The following is an approximate estimate of the materials and work on which bids will be received:

160 tons 12-in. cast-iron water pipe.
5,500 lbs. special castings.
Laying 3,650 ft. 12-in. cast-iron water pipe, valves and boxes.
One 1,000,000-gallon triple expansion duplex pumping engine.
One 125-HP. boiler.
Brick pumping station.
Constructing two filter beds, 17,000 sq. ft. area, and well.
Constructing railroad siding and coal pockets.

Plans can be seen at the office of the Board and specifications obtained from the Clerk after June 14, 1897.

Each bid must be accompanied by a certified check to order of E. H. Maynard, Treas., for a sum not less than 10 per cent. of the amount of the proposal, and a bond will be required for 50 per cent. of the amount of contract awarded.

The Board reserves the right to reject any or all bids.

Dated, Nyack, N. Y., June 2, 1897.

GEO. DICKEY,
F. COMISKY,
E. H. MAYNARD,
E. H. COLE, Clerk.
J. S. HARING, C. E. Engineer.
23-2t Water Commissioners.

OFFICE CONSTRUCTING QUARTERMASTER, Burlington, Vt., May 26, 1897.—Sealed proposals in triplicate will be received here until 12 m., June 26, 1897, and then opened for CONSTRUCTION, PLUMBING, HEATING AND GAS-PIPING AT FORT ETHAN ALLEN, VT., of one double barrack and three double sets of officers' quarters; also, for the CONSTRUCTION AND PLUMBING of two cavalry stables. Information furnished on application. Envelopes containing proposals should be marked "Proposals for ——," and addressed Captain GUY HOWARD, A. Q. M. 21-4t

Commonwealth of Massachusetts.

METROPOLITAN WATER BOARD.

LAYING WATER PIPE.

Sealed proposals will be received at the office of the Metropolitan Water Board, 3 Mt. Vernon Street, Boston, Mass., until 2.30 o'clock p. m., of Thursday, June 24, 1897, for laying 8,900 feet of 48-inch cast-iron water pipes in Brookline and Brighton.

Pamphlets containing further information for bidders, forms of proposal, contract and specifications, will be mailed to contractors who apply to the Chief Engineer, or may be obtained at his office, 3 Mt. Vernon Street, and plans may be seen at his office. The printed forms must be used in making proposals. The Board reserves the right to reject any or all proposals, or to accept the proposal deemed best for the Commonwealth.

HENRY H. SPRAGUE, Chairman.
WILMOT R. EVANS,
HENRY P. WALCOTT,
Metropolitan Water Board.
FREDERICK P. STEARNS, Chief Engineer.
WILLIAM N. DAVENPORT, Secretary.
Boston, June 8, 1897. 23-2t

SEWERS.

TONAWANDA, N. Y.

Sealed proposals will be received by the Board of Sewer Commissioners of the Village of Tonawanda, N. Y., for furnishing the necessary material and performing the labor of constructing additional sewers in the Village of Tonawanda.

The work to be done comprises the following section: Delaware Street, south of State Ditch, 8-in. tile, 6,000 ft.; 18-in. tile, 4,200 ft.; 24-in. tile, 1,800 ft. Grove Street, 10-in tile, 1,000 ft., along State Ditch, 8-in. tile, 650 ft. Grove Street Siphon, under State Ditch, 6-in. tile, 650 ft.

Plans and specifications may be seen at the Village Clerk's Office, Tonawanda, N. Y.

The Sewer Commissioners reserve the right to reject any and all bids.

Bids will be opened on Thursday, June 24th, at 7.30 p. m., at Village Clerk's Office.

By order of the Board of Sewer Commissioners.

E. W. BETTS, Clerk.
Tonawanda, N. Y., June 5, 1897. 23-2t

WATER-WORKS.

GIBSONBURG, OHIO.

Sealed proposals will be received by the Water-Works Trustees of the Incorporated Village of Gibsonburg, at the Village Hall of said Village, until 12 o'clock noon of the 23d day of June, A. D. 1897, for furnishing materials and machinery, and performing the labor of constructing the following:

One Water-Works Pumping Plant, 750,000 gal. capacity.
Building for Pumping Plant.
Service Reservoir, about 75,000 gal. capacity.
Stand-pipe, 13 x 110 ft.

Distribution system comprises about 4 miles of 4-in., 6-in. and 8-in. pipe, 46 hydrants and 28 valves and boxes, etc., in accordance with the plans and specifications now on file with the Water-Works Trustees aforesaid.

Each proposal must be accompanied by a certified check on a Gibsonburg, Ohio, Bank, in the sum of $1,000, and made payable to Dr. N. B. Ervin, Chairman of said Board of Trustees. In case any bid should be for only part of the work, then the bid shall be accompanied by a certified check same as heretofore stipulated in a sum equivalent to 10% of the amount of the bid.

All proposals must be made out in ink, using the printed forms embodied in the specifications.

Plans and specifications may be seen at the office of the Board of Water-Works Trustees or at the office of the Engineer at Chicago.

The Trustees reserve the right to reject any or all bids.

By order of the Water-Works Trustees.

DR. N. B. ERVIN,
R. MORRISON,
P. A. RUST,
Trustees.
F. A. HERMAN, Clerk,
for the Board.
BURTON J. ASHLEY, Engineer,
23-2t 1560 Old Colony Building, Chicago.

U. S. ENGINEER OFFICE, Burke Building, Seattle, Wash., May 10, 1897.—Sealed proposals for furnishing 500,000 TONS OF STONE and other materials for construction of JETTY at Gray's Harbor, Washington, will be received here until July 9, 1897, and then publicly opened. Information furnished on application. HARRY TAYLOR, Capt., Engrs. 20-6t

Other Proposals, Pages XXIV & XXVI

TUNNEL.

RIVERSIDE, ILL.

Sealed proposals pertaining to the Improvement of the Water Supply will be received at the office of the Village Clerk of Riverside, Cook County, Ill., until noon, Standard time, July 5th, 1897, for the excavation of a shaft seventy-three feet deep and two hundred feet of small tunnel, together with lining for the same and collateral work. The excavation is entirely in rock. Plans and specifications and other information are available at the office of Thos. T. Johnston, C. E., Room 1009 Security Building, Madison Street and Fifth Avenue, Chicago, Ill. The right to reject any and all proposals is reserved. Proposals must be accompanied with a certified check for the sum of three hundred dollars, payable to the order of the Treasurer of the Village of Riverside, and drawn on some responsible bank doing business in the City of Chicago. 23-2t

ASPHALT PAVING.

DEPARTMENT OF PUBLIC WORKS,
READING, PA., June 14, 1897.

Sealed proposals will be received at the office of the Board of Public Works of the City of Reading, until 3 p. m., of Monday, June 28, 1897, for the paving of Penn Street, from Front to Eleventh Street, with Sheet Asphaltum of a quality equal to Trinidad or Bermudez Asphalt, and to be approved by the City Engineer and Board of Public Works, but no Rock Asphalt bids will be considered.

A proposal bond or certified check in the sum of Ten Thousand (10,000) Dollars must accompany each bid, and the bidder will be required to enter into a contract bond in the sum of Forty (40) percentum of the total amount of the contract.

Plans and specifications can be seen and blank forms of proposals obtained at this office.

The right is reserved to reject any or all bids.

S. S. HOFF,
24-1t City Engineer.

ELECTRIC LIGHTS.

AMSTERDAM, N. Y.

Sealed proposals for lighting the City of Amsterdam, N. Y., will be received at the office of the city clerk of said city, until June 22d, 1897, at which date they will be publicly opened by the common council. Proposals must be for a term of three and five years beginning Jan. 1st, 1898; not less than 140 arc lights of 1,200 candle power, and not less than ten incandescent lights of 50-candle power, to be lighted every night from dusk to dawn.

A certified check for one thousand dollars ($1,000) must accompany each bid, as a guarantee that the parties to whom the contract is awarded will enter into contract and file a good and sufficient bond in the sum of $5,000, with two sureties, within fifteen days from the time of awarding said contract.

The common council reserves the right to reject any and all bids. For specifications address

THOS. J. HAZLETT,
24-1t City Clerk.

BRICK PAVING.

LANSINGBURGH, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Lansingburgh, N. Y., until three p. m., Thursday, July 1st, 1897, at a meeting to be held in the Trustees' Room, in Firemen Hall, for the opening of bids for the construction of Vitrified Brick Pavement on concrete foundation on Second Avenue in said village.

The approximate amount of pavement to be laid is sixty-two thousand square yards, and of curbing, twenty-five thousand lineal feet.

No bids will be received or considered unless accompanied by a certified check to the amount of Five Thousand ($5,000) Dollars drawn to the order of the Treasurer of the village.

Specifications and blank forms may be obtained by addressing George F. Wood, village president, and to whom all proposals must be addressed. All proposals must be made on blanks accompanying the contract and specifications.

The village reserves the right to reject any or all bids.

F. H. MITER,
Village Clerk.
C. E. HICKS,
Village Engineer. 24-2

PROPOSALS FOR SUBMARINE CABLE.—U. S. ENGINEER OFFICE, Willets Point, N. Y., May 27, 1897.—Sealed proposals for furnishing and delivering at Willets Point, N. Y., 30 miles single, and 9 miles seven-cored cable, will be received here until 12 m., July 6, 1897, and then publicly opened. Information furnished on application. JOHN G. D. KNIGHT, Major, Engrs. 22-4

vation, at 37 cts. a yd.; 3,900 sq. yds. sheet asphalt paving, at $1.60 a yd.; 1,500 lin. ft. curb (new), at 45 cts. a ft.; 500 lin. ft. curb, reset and redressed, at 18 cts. a ft.; 100 lin. ft. crossing, reset and redressed, at 8 cts. a ft.; total, $7,494.

PIER SUPERSTRUCTURE.—Calumet Harbor, Ill.—Maj. W. L. Marshall, U. S. Engrs., Chicago, informs us that the following bids were received June 8 for rebuilding superstructure over North Pier at Calumet Harbor, as advertised in Engineering News:

Bids Received for Pier Superstructure at Calumet Harbor, Ill., June 8, 1897.

Items.	Heidmaier & New.	Hausler & Lutz.	N. J. Gaylord.	Geo. Cooper.	C. & P. Knudson.	Greens Dredging Co.	Chicago Star Con. & Dgd. Co.	Lydon & Drews Co.
White pine timber .....146,400 ft.B.M.	$38.50	$23.00	$28.00	$23.00	$24.75	$25.00	$26.50	$24.50
Wrought iron drift bolts 16,896 lbs.....	.03	.025	.025	.025	.0275	.028	.02	.025
Stone, 30 crds of 128 cu. ft. each....	8.00	6.00	6.00	6.00	6.50	7.00	6.00	6.00
White oak piles, etc., in place, 13....	15.00	14.00	13.00	11.00	13.50	10.80	12.60	9.00
Dredge chain secured in place, 130 lbs.	.20	.10	.07	.12	.085	.10	.07	.06
Total	$6,604	$4,165	$4,880	$4,128	$4,470	$4,496	$4,570	$4,314

BRICK PAVING.—Cedar Rapids, Ia.—E. P. Boynton, Cy. Engr., informs us that the following bids were recently received for brick paving; curbing 5 × 22-in.:

Items.	Edwards & Walsh Co., Davenprt.	Des Moines Brick Mfg. Co.	J. B. McGorrick, Des Moines.	Wm. Horrabin, Iowa City, Ia.	*J. C. Likes, Des Moines, Ia.
Berea curbing, lin. ft.	$0.45	$0.53	$0.48	$0.45	$0.44
Reset'g curb, lin. ft.	.10	.10	.20	.25	.09
Brick paving, sq. yd.	1.15	1.07	1.09	1.11	.99
Excavation, cu. yd..	.20	.20	.26	.30	.20
Extra macad., sq. yd.	1.50	1.50	1.80	1.85	1.50
Gut'r bdgs, wth cbs	12.00	10.00	17.00	17.25	11.00
Totals	$52,250	$50,090	$50,870	$51,690	$45,800

*Awarded contract.

MASONRY BRIDGE.—New York, N. Y.—The following bids were opened by the department of public works June 14 for building a bridge across Spuyten Duyvil Creek, connecting Kingsbridge road and Broadway:

BIDS OPENED BY THE DEPARTMENT OF PUBLIC WORKS, NEW YORK, JUNE 14, FOR CONSTRUCTING A BRIDGE ACROSS SPUYTEN DUYVIL CREEK.

Quantities		I. A. Hopper, 219 W. 125th St.	A. McMullen, 26 Cortlandt St.	Stephens & O'Rourke, 44 Broadway.	Steward & McDermott, W. 154th St. & 7th Ave.	Yeandle & Riley, Kingsbridge.	Kelly & Kelley, St. Paul Bldg.	J. J. Hopper, 217 W. 125th St.	C. Sillery, 450 E. 80th St.	E. Shanley, 166 W. 122d St.	Thos. Dwyer, Temple Court.	Gildersleeve & Smith, 30 Cortlandt St.	M. J. Dady, Brooklyn, N. Y.	Warren-Scharf Asp. Pav. Co., 81 Fulton St.	Patk. Casey, 201 E. 28th St.
Excavation: Rock, below high water....	1,500 cu. yds.	$8.00	$5.00	$3.50	$4.90	$5.50	$2.00	$20.00	$5.50	$4.00	$6.00	$4.00	$7.00	$8.00	$6.00
Earth, below high water.....	600 " "	1.00	1.50	3.50	1.00	2.50	4.50	5.00	4.50	.60	1.00	4.00	2.00	1.00	2.00
Earth and rock above high water.....	800 " "	.75	.75	3.20	.50	1.50	1.00	2.00	.50	.20	1.00	.05	1.75	1.25	1.50
Embankment, including rip-rap.....	45,000 " "	.50	.40	.42	.39	.35	.32	.40	.45	.35	.40	.29	.55	.445	.55
Stone masonry, below high water.....	1,150 " "	10.35	9.50	13.00	12.00	8.00	13.00	17.00	10.00	9.00	8.00	5.75	10.00	13.50	5.00
Above high water	550 " "	10.50	9.50	10.00	12.00	7.50	6.70	13.00	10.50	10.00	25.00	10.00	10.00	26.00	10.00
Granite coping	1,350 cu. ft...	1.50	1.50	1.50	1.50	2.00	1.50	2.20	1.50	2.00	3.00	1.50	1.75	2.80	3.50
Concrete	100 cu. yds.	8.00	7.50	5.00	8.50	5.00	3.00	8.50	7.00	10.00	15.00	6.00	6.00	5.20	6.00
Brick work	150 " "	10.80	10.50	12.00	13.00	9.00	4.00	11.00	11.00	9.00	12.00	10.00	10.00	12.57	10.00
Dry stone wall	400 " "	2.70	3.50	4.00	2.00	2.50	3.00	2.60	2.25	2.00	4.00	2.00	3.50	1.80	4.00
Timber	6,000 ft..B.M.	40.00	30.00	40.00	40.00	.025	50.00	40.00	45.00	30.00	30.00	30.00	25.00	30.00	20.00
12-in. pipe to lay and haul	1,200 lin. ft..	1.00	.50	1.00	1.50	.25	.30	.50	.50	.35	1.00	.15	.75	.46	1.50
12-in. stop cocks and boxes, to haul, etc.	2.....	10.00	5.00	25.00	50.00	10.00	5.00	5.00	8.00	5.00	20.00	25.00	10.00	8.00	10.00
"A" hydrants to haul and set	6.....	25.00	5.00	25.00	50.00	12.00	5.00	10.00	8.00	5.00	20.00	10.00	10.00	8.00	10.00
Cast-iron drain boxes furnished and set	4.....	10.00	10.00	15.00	20.00	10.00	10.00	5.00	10.00	15.00	20.00	20.00	25.00	25.00	15.00
Telford macadam pavement.....	5,500 sq. yds.	.90	1.00	.90	1.50	.80	1.00	2.00	.98	.85	1.00	.58	1.35	1.00	1.30
Asphalt roadway	310 " "	2.75	3.00	2.75	2.00	2.50	1.80	2.75	3.50	3.00	3.50	3.50	1.50	3.00	4.00
Rock asphalt sidewalk	200 " "	2.00	2.50	2.25	2.00	2.25	1.80	2.25	2.50	2.00	3.00	2.50	1.50	2.65	3.50
Curb reset	400 lin. ft..	.10	.10	.10	.10	.02	.20	.15	.10	.10	.10	.20	.10	.10	.05
Flagging relaid	1,600 sq. ft...	.10	.05	.05	.10	.02	.20	.10	.05	.05	.10	.10	.05	.02	.03
Curb and crosswalk furnished and set..	2,200 lin. ft..	.75	.60	.65	.45	.40	.50	.35	.60	.45	.60	.70	.80	.58	.30
Flagging furnished and laid.....	6,000 sq. ft...	.25	.22	.25	.25	.18	.30	.20	.20	.18	.20	.25	.10	.20	.15
Bridge railing furnished and set.....	100 lin. ft..	5.00	3.50	4.00	2.50	5.00	5.00	2.00	3.75	2.50	4.00	3.75	4.50	4.00	10.00
Steel and iron work, incldg painting..	305,000 lbs.....	.025	.025	.0275	.023	.03	.01	.024	.028	.03	.025	.02	.0235	.0248	.035
Total		$83,730	$67,425	$74,975	$73,670	$63,382	$57,668	$108,713	$73,654	$62,265	$79,850	$53,608	$80,770	$88,779	$80,278

BRICK PAVING.—Galesburg, Ill.—We have received a statement of the bids opened by the council June 7 for brick paving; all bids being rejected and new ones to be opened June 21; the bids for the two larger contracts were as follows:

Bidder.	Earthwork, 8,950 cu. yds.	Pavement, 22,100 sq. yds.	Curbing, 10,400 lin. ft.	Total.
Seminary St.*:				
J. F. Britz & Son, Springfield, Ill.	$0.20	$1.21	$0.52	$33,939
S. Schulte, Fort Madison, Ia.....	.18	1.19	.40	32,070
Edwards & Walsh Co., Davenport	.20	1.16	.40	31,586
Nelch, Patteson & Strippler.....	.20	1.20	.40	32,470
John Bassler, Galesburg, Ill.....	.19	1.10	.413	30,301
C. D. Budd, St. Louis, Mo.....	.18	1.13	.41	30,848
J. S. Allen, Peoria, Ill.....	.20	1.20	.50	33,510
Berry & Welch, Iowa City, Ia.....	.16	1.16	.50	32,268
J. B. McAuley, Galesburg, Ill.....	.22	1.19	.40	32,428
H. D. Dougherty, Canton, Ill.....	.18	1.15	.40	32,284

Bidder.	Earthwork, 8,086 cu. yds.	Pavement, 20,171 sq. yds.	Curbing, 12,444 lin. ft.	Total.
Knox and Lombard Sts.*:				
J. F. Britz & Son, Springfield, Ill.	$0.20	$1.21	$0.52	$32,617
Edwards & Walsh Co., Davenport	.22	1.20	.40	31,096
Nelch, Patteson & Strippler.....	.20	1.19	.40	30,720
John Bassler, Galesburg, Ill.....	.20	1.125	.42	29,658
J. S. Allen, Peoria, Ill.....	.20	1.20	.50	32,166
C. D. Budd, St. Louis, Mo.....	.18	1.13	.41	29,461
J. B. McAuley, Galesburg, Ill.....	.21	1.20	.42	31,258

* Double course, brick pavement.

HYDRANTS.—New York, N. Y.—The department of public works opened the following bids June 14 for furnishing and delivering 200 double-nozzle case hydrants:

	Each
Kennedy Valve Mfg. Co., 75 John St., N. Y....	$37.75
Camden Iron Works, Camden, N. J.....	43.25
M. J. Drummond, 192 Broadway, N. Y.....	45.00
Norwood Engineering Co., Florence, Mass.....	46.45
Fox & Engle, 253 Broadway, N. Y.....	49.50

(For other Contract Prices, see page 229.)

INDUSTRIAL NOTES.

THE PENNSYLVANIA RAILROAD CO. will build 65 new engines at its Altoona (Pa.) shops this year, according to report.

THE MARITIME CANAL CO., Nicaragua, C. A., has called a special meeting of the stockholders for June 18 to approve an issue of $150,000,000 in 5% bonds. The company is authorized to issue $100,000,000 in stock, of which about $22,000,000 has been issued. No bonds have yet been issued.

THE BARBER ASPHALT PAVING CO., 11 Broadway, New York, N. Y., has changed its address from No. 1 to No. 11 Broadway.

THE ILLINOIS STEEL CO., Joliet, Ill., has reopened its Merchants Mill, employing 450 men, after a shutdown of three months.

THE CRESCENT STEEL & TINPLATE CO., Cleveland, O., is erecting a 20-inch cold rolling mill and a No. 2 Mesta picking machine.

THE BALDWIN LOCOMOTIVE WORKS, Philadelphia, Pa., is said to have received orders for nine locomotives from the Chinese Government.

THE CARNEGIE STEEL CO., Pittsburg, Pa., is reported to have received an order from the Chinese Government for $400,000 worth of railway iron.

THE PENNSYLVANIA TUBE WORKS, Pittsburg, Pa., will begin work soon on an order for 90 miles of 4-inch pipe for the Morena Emin Petroleum Co., of Amsterdam, in the Netherlands, which will be sent to the island of Sumatra.

THE CHESTER PIPE & TUBE CO., Chester, Pa., is reported to have a contract for 300 miles of pipe, which will require nine months to complete.

THE WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, Pa., will furnish four 800-K.-W. direct connected generators for the South Side Elevated R. R., Chicago, Ill.

MACKINTOSH, HEMPHILL & CO. have the contract and are building two 42 × 60-in. and two 50 × 60-in. engines for the Shenango Valley Steel Co., New Castle, Pa., for its continuous sheet-bar mill.

THE MORSE MACHINE CO., Rochester, N. Y., is building an unusually large blueprint apparatus for the engineering department of the city of Rochester, N. Y., to be placed in the remodeled city hall.

THE DELAWARE IRON WORKS, Newcastle, Pa., is said to be about to ship 100 tons of iron trolley and telegraph poles to North and South Africa. Recently 200 tons were shipped to Cairo and Cape Town.

THE UNION IRON WORKS, San Francisco, Cal., recently shipped nine steel barges to Russia, to be used for the navigation of Siberian rivers in connection with the Trans-Siberian Ry., according to report.

THE MARYLAND STEEL CO., Sparrows Point, Md., has secured an order from India for 7,500 tons of steel rails, says a press report. The same mill has also received an order for 100 tons of steel billets for the Russian market.

THE EGYPTIAN PRESERVATIVE CO., 604 Girard Building, Philadelphia, Pa., announces that the Pennsylvania R. R. Co. has adopted Cerion to cover and protect the iron and steel work of its passenger depot and train shed at Jersey City, N. J.

THE STILWELL-BIERCE & SMITH-VAILE CO., Dayton, O., through its Chicago office, has been awarded the contract for a 2,500,000-gallon pumping engine, condensers, etc., for the water-works at Fremont, Neb.; also a contract for the Edgerton (Wis.) water-works.

DR. CHAS. H. M'KENNA, 221 PEARL ST., New York city, has been engaged by Sooysmith & Co., of New York, to make systematic tests of the daily deliveries of cement used in the foundations of the new Empire building, now being erected at Broadway and Rector St. There are great advantages to an engineer carrying on work in the vicinity of a large city in employing some well-equipped and thoroughly reliable testing laboratory to make the tests of cement and other materials used in construction. Such tests can be made at far less cost in such a laboratory, equipped with all the test machinery and labor-saving appliances, than they can be in an improvised laboratory at the site where the work is done, and also testing can be done with an accuracy and on a scale which is not possible in the circumstances under which tests on the works are usually made.

LIST OF EXHIBITS AT THE OLD POINT COMFORT CONVENTION OF THE MASTER CAR BUILDERS' ASSOCIATION.

Air and Steam Coupler.—Automatic Air and Steam Coupler Co., St. Louis, Mo.

Air Brake Dust Guard.—Toledo Railway Appliance Co., Toledo, O.

Air Brake Hose and Rubber Goods.—Boston Belting Co., Boston, Mass.; Boston Woven Hose & Rubber Co., Boston, Mass.; New York Belting & Packing Co., New York; Peerless Rubber Mfg. Co., New York; Revere Rubber Co., Boston, Mass.; William Yerdon, Fort Plain, N. Y.

Air Compressor.—Rand Drill Co., New York.

Belting.—Main Belting Co., Philadelphia, Pa.

Boiler Flues.—Shelby Steel Tube Co., Shelby, O.

Boiler Lagging and Pipe Coverings.—H. W. Johns Mfg. Co., New York; Keasby Matteson Co., Ambler, Pa.; J. D. McIlwain & Co., Pittsburg, Pa.

Car and Engine Brakes, beams, shoes and brake appliances.—American Brake Beam Co., Chicago; Bettendorf Axle Co., Davenport, Ia.; Chicago Railway Equipment Co., Chicago; Composite Brake Shoe Co., Boston, Mass.; Interchangeable Brake Beam Co., St. Louis, Mo.; Kinzer & Jones Mfg. Co., Pittsburg, Pa.; Monarch Brake Beam Co., Detroit, Mich.; Q. & C. Co., Chicago; Sterlingworth Railway Supply Co., New York.

Car and Locomotive Journal Boxes.—McCord & Co., Chicago; National Malleable Castings Co., Cleveland, O.

Car and Locomotive Trucks and Bolsters.—American Steel Foundry Co., St. Louis, Mo.; Cloud Steel Truck Co., Chicago; Shickle, Harrison & Howard Iron Co., St. Louis, Mo.; Simplex Railway Appliance Co., Chicago.

Car and Replacing Jacks.—Joyce, Cridland & Co., Dayton, O.; A. A. Norton, Boston, Mass.; Pearson Jack Co., New York; B. E. Tildon Co., Chicago; Williams & Moore Jack Co., Chicago.

Car Couplers and draft rigging.—Brown Automatic Car Coupler Co., Columbus, Ind.; Buckeye Malleable Iron & Coupler Co., Columbus, O.; Donnell, Field & Co., Otley, Ia.; Edwards Car Coupler Co., Troy, N. Y.; Erie Malleable Iron Co., Erie, Pa.; W. H. Frater, Upper Sandusky, O.; Globe Car Coupler Co., Richmond, Va.; Gould Coupler Co., New York; Gravity Car Coupling Co., Colorado Springs, Colo.; Marion Car Coupler Co., Marion, O.; Michigan Malleable Iron Co., Detroit, Mich.; National Car Coupler Co., Chicago; National Malleable Castings Co., Cleveland, O.; Peerless Car Coupler Co., New York; Pratt & Letchworth, Buffalo, N. Y.; Railroad Supply Co., Chicago; Safety Car Coupling, Philadelphia, Pa.; Sams Automatic Car Coupler Co., Denver, Colo.; Smillie Coupler Co., Newark, N. J.

Car Curtains, Upholstery and Linings.—Boston Artificial Leather Co., Boston, Mass.; E. T. Burrowes & Co., Portland, Me.; L. C. Chase & Co., Boston, Mass.; O. M. Edwards, Syracuse, N. Y.; Forsythe Bros. & Co., Chicago; Knitted Mattress Co., Canton Junction, Mass.; Pantasote Leather Co., New York.

Car Doors, Hangers, Locks and Fixtures.—Chicago Grain Door Co., Chicago; National Railway Specialty Co., Chicago; The Sinclair-Scott Co., Baltimore, Md.; Edgar Sebring Car Seal & Lock Co., Colorado Springs, Colo.; M. E. Kanaly Co., Cambridgeport, Mass.

Car Heating System.—Gold Car Heating Co., New York.

Car Roofs and Roofing.—F. W. Bird & Son, East Walpole, Mass.; P. H. Murphy Mfg. Co., St. Louis, Mo.; Standard Paint Co., New York.

Car Seats.—Hale & Kilburn Mfg. Co., Philadelphia, Pa.; Pottier & Stymus, New York.

Dump Car.—Goodwin Car Co., Chicago.

Flexible Joints.—Moran Flexible Steam Joint Co., Louisville, Ky.

Gas Engines.—Fairbanks, Morse & Co., Chicago; Webster Mfg. Co., Chicago.

Headlights.—Pyle-National Electric Headlight Co., Chicago.

Inspirator and Ejector.—Hancock Inspirator Co., Boston, Mass.

Journal Cooler.—Cook Cooler Co., Flint, Mich.

Locomotive Pressure Gages, Valves, etc.—Crosby Steam Gage Co., Boston, Mass.; Star Brass Co., Boston, Mass.

Locomotive Sanders.—Leach Locomotive Sander, Boston, Mass.; Western Railway Equipment Co., St. Louis, Mo.

Lubricators.—Detroit Lubricator Co., Detroit, Mich.

Machine and Hand Tools.—Acme Machinery Co., Cleveland, O.; Brown & Sharp, Providence, R. I.; Chicago Pneumatic Tool Co., Chicago; Detrick & Harvey Machine Co., Baltimore, Md.; John R. Jones, Philadelphia, Pa.; Watson & Stillman, New York.

Malleable Castings.—Missouri Malleable Iron Co., St. Louis, Mo.

Rail Insulation.—New York Rail Insulation & Equipment Co., Newark, N. J.

COLUMBIA CONSTRUCTION CO.,

Importers and Refiners of **TRINIDAD ASPHALT** FOR STREET PAVING.

Main Office, 35 HERALD BLDG., SYRACUSE, N.Y.
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Refinery at Jones' Point.

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The simplest, strongest, most durable and cheapest Sewer Brace on the market.

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Western Wheeled Scrapers.

The most practical and durable Scrapers made.

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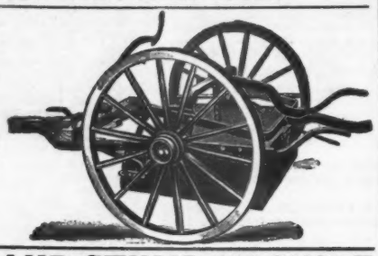

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HAWKEYE GRUB AND STUMP MACHINE

Makes clean sweep of two acres at a sitting. Pulls an ordinary Grub in 1½ minutes.

Is a MONEY SAVER for CONTRACTORS and ENGINEERS having Right-of-Ways and Reservoir Sites to clear, and Levee and Dike Contracts.

90 page Catalogue free on application. Works on either standing Timber or Stumps.

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SANITARY CONSTRUCTION CO.,

56-58 PINE STREET, NEW YORK,

HOUSEHOLD GARBAGE CARBONIZER, for the Disposal of Domestic Waste.
PORTABLE GARBAGE FURNACES, for Hotels, etc.
STEAM DISINFECTING APPARATUS, for Public Institutions and Cities.
FORMALDEHYDE GAS REGENERATORS, for House Disinfection.
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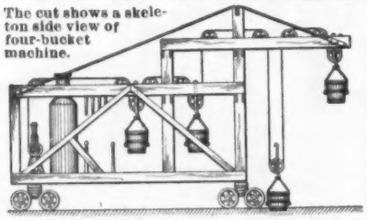

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For Excavating and Refilling all kinds of Trenches. We build three sizes, to carry 2, 3 or 4 buckets, holding 10, 18, or 27 cu ft. each, as desired. Car is self-propelled. Each bucket is independent of the other. Trucks under car are swiveled and will follow any curve and turn corners. **It requires only one man to run it.** Ask us more about it. Address **GEO. D. GRANNIS, Grand Opera House, Syracuse, N. Y.**

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J. N. Du Barry, Jr., & Co.

Harrison Building, Philadelphia, Pa.

RAILWAY SUPPLIES,
CONTRACTORS' SUPPLIES,
CEMENTS.

J. N. Du Barry, Jr., & Co.

Builders' Exchange, Baltimore, Md.

CEMENTS,
BUILDERS' MATERIALS,
HARDWOOD and SLATE MANTELS,
SEWER PIPE.

Agents for Stirling Boilers, Meissner Stoker, Pedrick & Ayer Co.

NONPAREIL

Cork Pipe Covering.

HIGHEST EFFICIENCY.

Not affected by any steam-heated surface, water, dampness, frost, concussion nor vibration.

HOLDS ITS FORM. VERY TOUGH

POWER SPECIALTY CO. 126 Liberty St., N. Y.

FLEXIBLE JOINTS

FOR WATER PIPES, FOR GAS, OIL, COMPRESSED AIR, ETC.

Strongest, Cheapest, Easiest to Use. Contracts taken for Submerged Pipe Laying. Correspondence Solicited.

A. L. HOLMES, Grand Rapids, Mich

GRAVEL ROAD.

CAMDEN COUNTY, N. J.

Bids Wanted — For the construction of a Gravel Road, in Camden Co., N. J. Beginning at Berlin, and extending in a southeasterly direction, through Waterford and Elm to Atlantic County line, a distance of eleven and one-tenth miles, more or less.

To be built in all respects in accordance with the profile and specifications, a copy of which may be seen at the office of the County Collector in the Court House at Camden, N. J., from 10 a. m. until noon.

The successful bidder will be required to furnish a satisfactory bond in the sum of $8,000, for the faithful performance of the contract when the same shall have been awarded to him. Each bid shall be accompanied with a certified check, cash or approved bond in the sum of $1,000. Conditioned that if the contract shall be awarded to bidder he will when required, execute an agreement in writing to perform the work, in accordance with the specifications.

All bids shall be presented to the Chairman of the Road Committee and only at the Freeholders' Room in the Court House in Camden, on July 14 at 10 a. m., at which time and place all bids will be opened and read.

The Committee reserves the right to accept or reject any or all bids.

E. T. GILL, Chairman Road Committee.

June 14, 1897. 24-3t

U. S. ENGINEER OFFICE, Burke Building, Seattle, Wash., May 26, 1897.—Sealed proposals for constructing GUN EMPLACEMENTS on Marrowstone Point, Washington, will be received here until June 30, 1897, and then publicly opened. Information furnished on application. HARRY TAYLOR, Capt. Engrs. 21-4t

PAVING.

CITY CLERK'S OFFICE, BINGHAMTON, N. Y., June 14, 1897.

Notice is hereby given that sealed proposals for paving Main Street, from the present westerly terminus of the Asphalt pavement on said street to the west side of Laurel Avenue, in accordance with the specifications prepared by the City Engineer and now on file in the City Clerk's office, will be received by the Common Council until 7.30 o'clock p. m., July 1st, 1897.

Blank forms for proposals may be obtained of the City Clerk, at his office.

BURR W. MOSHER, City Clerk.

24-2t

PAVING.

CITY CLERK'S OFFICE, BINGHAMTON, N. Y., June 14, 1897.

Notice is hereby given that sealed proposals for paving Washington Street, from the present northerly terminus of the Asphalt pavement on said street, northerly to the Asphalt pavement on Lewis Street, in accordance with the specifications prepared by the City Engineer and now on file in the City Clerk's office, will be received by the Common Council until 7.30 o'clock p. m., July 1st, 1897.

Blank forms for proposals may be obtained of the City Clerk at his office.

BURR W. MOSHER, City Clerk.

24-2t

SEWER SYSTEM.

PADUCAH, KY.

Sealed bids will be received by the Common Council of Paducah, Ky., at the office of the Council Clerk, until 4 o'clock p. m., July 5, 1897, for the construction of a system of sanitary sewers, according to specifications on file in the office of the Council Clerk.

Proposals must be made on the blank forms to be furnished by Council Clerk.

For specifications and blank forms address the Council Clerk.

The right is reserved to reject any and all bids.

D. A. YEISER, Mayor.

24-3t

PAVING MATERIAL.

BOARD OF PUBLIC WORK, CITY OF HOLYOKE, MASS.

Sealed proposals addressed to the Board of Public Works and indorsed "Proposals for Asphalt Blocks" for asphalt, and "Proposals for Brick" for brick paving, will be received at the office of the Board of Public Works, room No. 2, City Hall, Holyoke, Mass., until 5 o'clock p. m., Friday, June 25th, 1897.

Each proposal for asphalt block paving must be accompanied by a certified check of two hundred dollars ($200), drawn payable to the City of Holyoke, Mass., and state price per thousand for asphalt blocks delivered f. o. b. cars, Holyoke, Mass. A sample of the asphalt blocks to be sent to the Board of Public Works with a statement giving the composition and name of asphalt of which blocks are made. About seventy-five thousand (75,000) blocks or three thousand (3,000) square yards will be required.

Each proposal for vitrified brick shall be accompanied by a certified check of two hundred dollars ($200.00), drawn upon a national bank or trust company established in either Holyoke, Mass., Springfield, Mass., Boston, Mass., or New York City, and payable to the City of Holyoke. About three thousand (3,000) square yards (180,000 brick) will be required. Samples of brick to be furnished said Board.

The above-mentioned certified checks are to be furnished in accordance with the provisions of Section 51 of "An Act to Revise the Charter of the City of Holyoke." Said checks will be returned to the unsuccessful bidders as soon as the contracts have been awarded and to the successful bidders as soon as the contract and bond has been duly executed.

Contractors can secure fuller information upon application to the Board of Public Works.

The right to reject any or all proposals is reserved.

Proposals will be marked as directed above and directed to the Chairman of said Board.

THE BOARD OF PUBLIC WORKS,
JAMES H. NEWTON, Chairman.
OSCAR C. FERRY, Asst. Clerk.
JOHN J. KIRKPATRICK, City Engineer.

Holyoke, Mass., June 15, 1897. 24-1t

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., June 14, 1897.—Sealed proposals will be received at this office until 2 o'clock p. m., on the 16th day of July, 1897, and opened immediately thereafter, for all the labor and material required for the INTERIOR FINISH of the U. S. Post Office, Court House and Custom House, at Milwaukee, Wisconsin, in accordance with drawings and specifications, copies of which may be had at this office or at the office of the Superintendent at Milwaukee, Wis. Each bid must be accompanied by a certified check for a sum not less than 2% of the amount of the proposal. The right is reserved to reject any or all bids or to waive any defect or informality in any bid should it be deemed in the interest of the government to do so. All bids received after the time stated for opening will be returned to the bidders. C. E. KEMPER, Acting Supervising Architect. 24-2t

For Other Proposals see Page XXVI.

BRICK CULVERT.

NASHVILLE, TENN.

The Board of Public Works and Affairs of the City of Nashville, Tenn., will be prepared to receive bids until 3 o'clock p. m., July 1st, 1897, for constructing 900 lin. ft. of 6-ft. brick culvert, with incidental work, at the Upper Island, to be used as the main conduit for the filtering gallery.

Specifications and drawing are on file at the City Engineer's office.

By order of the said Board.

J. A. JOWETT, City Engineer.

24-1t

PAVING CHANNEL.

DEPARTMENT OF WATER, ALTOONA, PA., June 15, 1897.

Sealed proposals—In compliance with an ordinance of councils, under date of June 14, 1897, directing the water commissioners to advertise for bids for paving with cut stone that portion of the flood water channel, from about station 15 to the intake at the old Kittanning Point reservoir, sealed proposals for the paving of the same for the city of Altoona, Pa., at Kittanning Point will be received at the office of the Altoona Board of Water Commissioners, Altoona, Pa., until 12 m. of Wednesday, the 30th day of June, 1897.

Each bid must be accompanied by a certified check on a national bank for five hundred ($500) dollars, made payable to the order of the chairman of the Altoona Board of Water Commissioners, as a guarantee that, in case the contract is awarded, the parties to whom the contract is awarded will, within five days after notification of award, execute said contract or forfeit said certified check to the city of Altoona.

Bond in the sum of twenty-five thousand ($25,000) dollars, with surety satisfactory to the councils of the city of Altoona will be required of those to whom the contract may be awarded.

Plans may be seen at the office of the water department, city of Altoona, and specifications procured from C. A. Martin, secretary, Altoona, Pa.

Councils hereby reserve the right to reject any and all bids, or to accept any that in their judgment will be for the best interest of the city. Bids must be made upon the forms furnished for that purpose and addressed to H. K. McCauley, chairman of the Altoona, Pa., board of water commissioners.

H. K. M'CAULEY, Chairman,
W. J. HEINSLING,
J. H. KILGORE,
Board of Water Commissioners.

C. A. MARTIN, Secretary. 24-1t

WATER-WORKS.

FREEDOM, PA.

Proposals will be received up to 7 p. m., July 1st, 1897, for the furnishing of materials and constructing a water-works as follows:

Furnishing and laying 1 mile 4-in. C. I. pipe.
" " " 1 " 6 " " "
" " " 1 " 8 " " "

Constructing 500,000-gallon Reservoir.

Constructing pump station, pump well and crib, furnishing and setting 26 fire hydrants, 23 valves and boxes, furnishing and placing 750,000-gallon double-acting triplex power pump, and furnishing and setting 50-horse-power gas engine, all in accordance with plans and specifications on file at the office of the Engineer.

A. McDONALD, Pres.
E. J. BISHOFFBERGER, Secy.
J. P. LEAF, C. E., Engineer,
Rochester, Pa. 24-2t

PAVING.

WASHINGTON, N. C.

Proposals are wanted until July 1st, 1897, for grading and paving about Eleven Hundred and Twenty-five lineal feet of street. Must be permanent and durable and capable of standing heavy hauling. Material to be suggested by party making proposal. Street about thirty feet, from curb to curb. Address

STEPHEN C. BRAGAW, Mayor.

24-2t

PROPOSALS FOR MACHINE TOOLS, Watertown Arsenal, Watertown, Mass., June 2, 1897.—Sealed proposals, in triplicate, will be received here until 12 o'clock m., June 22, 1897, for furnishing Machine Tools. Government reserves right to reject any or all proposals or parts thereof. Information furnished on application to Major J. W. REILLY, Ord. Dept., Comd'g. 23-2t

U. S. ENGINEER OFFICE, 136 Island St., Grand Rapids, Mich., June 11, 1897.—Sealed proposals for REPAIRING ABOUT 963 FEET OF PIER at Frankfort Harbor, Mich., will be received here until 12 o'clock noon, June 25, 1897, and then publicly opened. Information furnished on application. C. McD. TOWNSEND, Capt., Engrs. 24-2t

Signal Lamps.—The Railroad Signal Lamp & Lantern Co., New York.

Water Filter & Cooler.—A. Major, New York.

Wheels, Axles and Steel Forgings.—American Steel Casting Co., Thurlow, Pa.; Pencoyd Iron Works, Pencoyd, Pa.

NEW COMPANIES.—Capitaine Oil Motor Co., Stockton, N. J.; $500,000, commencing with $1,000; to manufacture and sell petroleum, gas, gazolene and acetylene gas motors, etc.; Geo. T. Harris, Philadelphia, Pa.; Edwin W. Preston, Merchantville, N. J.; Albert N. Heritage, Bryn Mawr, Pa.

Short Hills Park Assn., Newark, N. J.; $200,000, commencing with $10,000; to erect and control an electric light and gas plant, etc.; Louis Baier, Charles F. Herr, Beda Voigt, Paul Buchanan and Frederick W. Schmidt, Newark.

Wrisberg Construction & Supply Co., St. Louis, Mo.; $4,000; W. C. Wrisberg, George Schnieder and W. E. Wrisberg.

Fairmount Western Telegraph Co., Fairmount, W. Va.; $225, commencing with $25; to operate a telegraph line in this state; J. F. Martin, S. J. Sterm, P. B. Parrish and J. L. Sterm, Festus, W. Va.; Geo. W. Millan and Jas. W. Davis, Worthington, W. Va.; E. T. Wood, Farnington; Jno. W. Hess, W. E. Cunningham, Binghannon; G. H. Berry and F. H. Wilcox, Wyatt, W. Va.

Starke & St. Joseph Telephone Co., South Bend, Ind.; $5,000; to operate a telephone line from Knox to South Bend.

New York Chemical Refining Co., New York, N. Y.; $5,000; T. Channon Press and J. Aspinwall Hodge, Jr., New York; Robert Thompson, Brooklyn, N. Y.; Joseph Garrison, Newark, N. J.; Charles Gordon Richardson, New Brighton, N. Y.

Redpath Refrigerator Car Co., Charleston, W. Va.; $1,000,000, commencing with $20,300; N. H. Redpath, Boston, Mass.; George H. Hackett, Wakefield, Mass.; M. W. Clark, Portland, Me.; F. W. Morrill, Melrose, Mass.; S. B. Glaizer, Cambridge, Mass.

Tripler Air Refrigerator Co., New York, N. Y.; $5,000,000, commencing with $50; to deal in refrigerators, motors, engines, etc.; Cyrus C. Marble, George W. Ballon and Edward Brown, New York; Theodore Berdell, Summit, N. J.; Winthrop Pond, Port Chester, N. Y.

Conneaut Telephone Co., Conneaut, O.; $15,000.

Asphaltina Construction Co., Syracuse, N. Y.; $100,000; Henry N. Burhans, Ransom B. True, W. C. Brayton, H. F. Stevens, and William J. Gillett, Syracuse.

Southeast Building Co., Brooklyn; $500,000; to deal in real estate and erect buildings and factories; County Clerk Jacob Worth, Sheriff William J. Buttling, Coroner E. B. Coombs, James W. Edgett, and Samuel H. Coombs, Brooklyn; Winslow E. Busby, New York; Arthur A. Swany, Yonkers, N. Y.

Cleveland Machine Screw Co., Cleveland, O.; $3,000,000, commencing with $50; to deal in screw machinery, antifriction balls, etc.; H. H. Johnson, Geo. C. Ford, C. J. Gould, J. D. Climo and M. B. Johnson, Cleveland.

Manhattan Concentrated Co., Charleston, W.Va.; $2,000,000, commencing with $499,640; to separate and concentrate minerals, etc.; Charles H. Parmele, Wm. D. Hills, E. F. Hurt, J. S. Richards, and Woodville Fleming, New York, N. Y.

Powers Commercial Fireproof Building Co., Rochester, N. Y.; $650,000; Daniel W. Powers, Helen M. C. Powers, William Powers, John C. Powers, and Walter W. Powers, Rochester.

William Clark Ferry Co., incorporated in Pennsylvania; to operate a ferry over the Monongahela River at White Mills; Treas., John Clark, Elkhorn, Pa.

Prescott Placer Dredging Co., Tacoma, Wash.; $50,000; C. H. Prescott, S. J. Maxwell and Louis D. Campbell.

St. Joseph County Sewer & Paving Co., South Bend, Ind.; $3,000.

Construction & Security Co., Wiscasset, Me.; $33,330; to deal in labor and materials used in the construction of railroads; Geo. H. Crosby, Albron, Me.; Albert N. Card, Alma, Me.

Vance Boiler Works Co., Geneva, N. Y.; $15,000; Jas. R. Vance, Stephen D. Parker, Geo. W. Goodwin, William S. Moore, Barney Borgman and E. N. Squires, Geneva, N. Y.; James H. Haslett, Waterloo, N. Y.

Standard Plaster Co., Richmond, Va.; $100,000; to manufacture and sell wall plaster, and other building materials; Pres., John S. Harwood; Vice-Pres., R. H. Harwood, Richmond.

Dodge Motor Co., New York, N. Y.; $5,000,000, commencing with $50; to conduct a general motor, elevator and vehicle business. A. V. La Ban, Walter A. La Ban, and A. P. Dodge, New York; Frank Brewer, West Orange, N. J.; Jas. P. Williston, Seabright, N. J.

East Fields Road Co., Panguitch, Utah; $1,000; to buy land for, construct and keep in repair a wagon road near this place; John F. Chidester, James A. Worthen and thirteen others, Panguitch.

Kilmer-Cleveland Bale Tie Co., Cleveland, O.; $5,000; to deal in wire specialties; Robert C. Moody, Frank A. Hilliard, Edward S. Page, William A. Comstock, and Melvin D. Kilmer.

CONTRACT PRICES.

CURB AND GUTTER.—Minneapolis, Minn.—The following bids were received June 11 for furnishing artificial stone combined curb and gutter, 10 ins. deep: Standard Stone Sidewalk Co., 39½ cts. a lin. ft.; Star Paving Co., 37½ cts.; Nelson Bros., 42 cts., and John Kusel, 42½ cts.

SEWERS.—Iowa City, Ia.—The following bids were received June 4 for constructing three miles of brick and pipe sewers; Arthur J. Cox, Cy. Engr.:

Bids for Constructing Sewers at Iowa City, Ia., Opened June 4.

Bidder.	22x33-in., single ring, brk, 400 ft.	20-in., 400 ft.	12-in., 2,250 ft.	10-in., 1,420 ft.	8-in., 10,450 ft.	12-in. iron, 50 ft.	8-in. iron pipe siphon, 60 ft.	Manholes, 20.	Drop manholes, 3.	Flushtanks, 6-in. siphon, 10.	Dble flshtnks, 6-in. siphon, 2.	Catchbasins, 6.	Lampholes, 4.	Total.
Fifth Ward:														
Berry & Welch[1]	$1.04	$0.84	$0.575	$0.519	$0.36	$2.75	$1.75	$31.00	$36.00	$78.00	$115.00	$18.00	$3.00	$8,645
Ford & De La Hunt[2]	1.75	.92	.48	.40	.33	3.00	2.25	32.00	40.00	48.00	60.00	50.00	1.00	8,114
M. V. Kennedy[3]	2.05	.81	.55	.43	.33	3.90	3.05	21.00	27.00	55.00	68.00	75.00	6.00	8,479
K. A. Smith & Co.[4]	1.80	1.00	.45	.40	.35	2.25	2.25	25.00	33.00	48.00	55.00	25.00	1.00	7,950
William Horrabin[1]	1.14	.73	.45	.43	.36	.85	.06	25.00	30.00	65.00	70.00	17.00	2.50	7,709
Edwards, Walsh Con. Co.[5]	.90	.66	.38	.36	.29	1.60	1.00	24.00	30.00	55.00	60.00	28.00	1.00	6,574

Bidder.	8-in. iron pipe siphon, 360 ft.	Manholes, 1.	Flushtanks, 1.	Lampholes, 2.	Total.
First Ward:					
Berry & Welch[1]	$0.38	$32.00	$75.00	$4.00	$480
K. A. Smith & Co.[4]	.48	30.00	60.00	1.00	553
William Horrabin[1]	.38	30.00	75.00	2.50	475
Thomas Hanlon[1]	.34¾	30.00	65.00	1.00	431
Edwards, Walsh C. Co[5]	.34	30.00	55.00	1.00	413
Ford & De La Hunt[2]	.33	32.00	48.00	1.00	399

[1] Iowa City, Ia. [2] Cedar Rapids, Ia. [3] Des Moines, Ia. [4] Minneapolis, Minn. [5] Davenport, Ia.

SEWERS.—Galesburg, Ill.—We are informed that the following bids were received June 7 for constructing pipe sewers:

Bids Received for Constructing Pipe Sewers at Galesburg, Ill., June 7, 1897.

Bidder.	Sewer pipe. 12-in., 1,060 ft.	15-in, 1,210 ft.	18-in., 400 ft.	24-in., 1,848 ft.	Manholes, 7.	Catchbasins, 12.	Lampholes, 3.	Inlet wells, 12.
North Cedar St.								
*Nelch, Patteson & Strippler, Springfield, Ill.	$0.63	$0.73	$0.97½	$1.81½	$28.00	$30.00	$10.00	$6.00
J. B. McAuley, Galesburg, Ill.	.75	.90	1.20	2.40	35.00	30.00	15.00	8.00
James O'Connor, Galesburg, Ill.	.90	1.50	2.00	2.25	40.00	35.00	10.00	....
John Bassler, Galesburg, Ill.	.70	.84	1.05	2.00	29.50	34.50	8.00	....
Losey and Bateman Sts.	551 ft.	1,227 ft.	1093½ ft.		6.	9.	2.	9.
Chas. E. Renequist, Galesburg, Ill.	$0.74	$0.91	$1.06	.....	$30.00	$35.00	$5.00	.....
Stephen Shulte, Fort Madison, Ia.	.74	.80	.90	.....	28.00	33.00	4.50	.....
J. B. McAuley, Galesburg, Ill.	.65	.74	1.00	.....	25.00	28.00	12.00	$5.00
John Bassler, Galesburg, Ill.	.68	.83¼	1.04½	.....	29.00	33.50	7.00	.....
James O'Connor, Galesburg, Ill.	.65	.85	1.15	.....	30.00	35.00	10.00	.....
*Berry & Welch, Iowa City, Ia.	.578	.69	.91	.....	32.00	18.00	3.00	6.50

* Awarded contract.

PROTECTION WALL.—New York, N. Y.—The following bids were opened by the department of public works June 14 for facing bank in front of old engine house at Highbridge, with dry stone protection wall:

Quantities.	Thos. Dwyer.	J. J. Daly.	W. J. Haeder.	M. man. Lipps.
Excavation: Rock. 200 cu. yds.	$3.00	$4.00	$3.50	$4.00
Earth 300 " "	1.00	.40	.50	.50
Dry stone wall..2,000 " "	11.00	6.00	10.00	7.50
Embankment 300 " "	1.00	.13	.50	.50
Coping stone 500 lin. ft..	3.00	1.50	3.50	1.50

BRIDGE TOWER FOUNDATIONS.—New York, N. Y.—The total bids for building the Brooklyn tower foundations of the New East River bridge were published under Bridges last week. The bids in detail were as follows:

Bids for Brooklyn Tower Foundations, New East River Bridge, New York, June 9, 1897.

Bidder and material.	To datum planes shown on plans.	Datum to plane (c), north pier, 368⅔ cu. yds.	Datum to plane (c), south pier, 368⅔ cu. yds.	Planes (c) to (d), north pier, 368⅔ cu. yds.	Planes (c) to (d), south pier, 368⅔ cu. yds.	Planes (d) to (e), north pier, 140 cu. yds.	Planes (d) to (e), south pier, 81 cu. yds.	Planes (e) to (f), north pier, 46 cu. yds.	Planes (e) to (f), south pier.	Planes (f) to (g), north pier, 23 cu. yds.	Planes (f) to (g), south pier.	Total.
C. McLean	.....	$27.00	$18.00	$28.00	$27.00	$40.00	$32.00	$43.00	$35.00	$50.00	$42.00	.....
All granite	$498,000	9,954	6,636	10,323	9,954	5,600	2,592	1,978	....	1,150	....	$546,187
Part limestone	459,000	....	....	....	....	....	....	....	....	48,187	....	507,187
R.P.&J.H.Staats & T.J.Long	.....	30.00	18.00	36.00	21.00	45.00	23.00	50.00	25.00	60.00	35.00	.....
All granite	607,000	11,060	6,636	13,272	7,742	6,300	1,863	2,300	....	1,380	....	657,553
Part limestone	501,000	....	....	....	....	....	....	....	....	50,553	....	551,553
Jutte & Foley Co.	.....	21.00	18.00	24.50	21.00	30.00	25.00	45.00	35.00	50.00	45.00	.....
All granite	577,781	7,742	6,636	9,032	7,742	4,200	2,025	2,070	....	1,150	....	618,378
Part limestone	524,468	....	....	....	....	....	....	....	....	40,597	....	565,065
A. J. Tullock	.....	34.00	23.00	36.00	24.00	55.00	25.00	65.00	36.00	67.00	38.00	.....
All granite	630,000	12,535	8,479	13,272	8,847	7,700	2,025	2,990	....	1,541	....	687,390
Part limestone	570,000	....	....	....	....	....	....	....	....	57,390	....	627,390
Sooysmith & Co.	.....	30.00	28.00	34.00	30.00	36.00	35.00	40.00	36.00	45.00	40.00	.....
All granite	674,000	11,060	10,323	12,535	11,060	5,040	2,835	1,840	....	1,035	....	729,728
Part limestone	602,000	....	....	....	....	....	....	....	....	55,728	....	657,728
Warren-Scharf Asp. Pvg Co.	.....	15.00	13.00	17.00	15.00	33.00	28.00	33.00	28.00	33.00	28.00	.....
All granite	740,000	5,530	4,793	6,267	5,530	4,620	2,268	1,518	....	759	....	771,285
Part limestone	662,000	....	....	....	....	....	....	....	....	31,285	....	693,285
Patrick H. Flynn	.....	35.00	25.00	40.00	35.00	45.00	40.00	50.00	50.00	55.00	50.00	.....
All granite	670,000	12,903	9,217	14,747	12,903	6,300	3,240	2,300	....	1,265	....	732,875
Part limestone	650,000	....	....	....	....	....	....	....	....	62,875	....	712,875
Stephens & O'Rourke	.....	52.00	44.00	54.00	46.00	56.00	48.00	58.00	50.00	60.00	52.00	.....
All granite	728,000	19,171	16,221	19,908	16,959	7,840	3,888	2,668	....	1,380	....	816,035
Part limestone	666,000	....	....	....	....	....	....	....	....	88,035	....	754,035
Arthur McMullen & Co.	.....	55.00	40.00	55.00	40.00	60.00	45.00	65.00	50.00	65.00	50.00	.....
All granite	779,500	20,277	14,747	20,277	14,747	8,400	3,645	2,990	....	1,495	....	866,078
Part limestone	734,500	....	....	....	....	....	....	....	....	86,578	....	821,078
Engineer's estimate	.....	40.00	30.00	46.00	36.00	58.00	48.00	66.00	....	74.00	....	.....
All granite	625,500	14,747	11,060	16,959	13,272	8,120	3,888	3,036	....	1,702	....	698,284
Part limestone	586,400	....	....	....	....	....	....	....	....	72,784	....	659,184

SEWER BRICK.—Minneapolis, Minn.—The following bid was received by the council June 11 for furnishing 400 M. sand-molded sewer brick: Northern Hydraulic Pressed Brick Co., 125 M., at $6.75; 125 M., at $6.85; 150 M. at $6.97.

LAYING WATER PIPE.—Hatfield, Mass.—E. C. & E. E. Davis, Des. Engrs., Northampton, Mass., informs us that the following bids were received June 3 for laying water pipe, as advertised in Engineering News; depth of trench, 5½ ft.:

Bidder.	6-in. pipe; 25,692 ft.	4-in. pipe, 780 ft.	Rock, per cu. yd.
E. Gustine & Son, Keene, N. H.	$0.15	$0.15	$2.00
E.E.Eglee & Co., 173 W. 81st St., N.Y.	.12	.11	2.50
F. A. Caldwell, New Britain, Conn	.26	.17	4.00
*P. Clearson & Son, & A. C. Matthews	.10⅞	.10⅝	1.50
Westchester P. Wks. Co., Mt. Vernon	.14	.12	2.75
J. H. & W. H. Riley, Northampton..	.1395	.1395	2.50
J. Bruno, East Boston, Mass.	.23	.20	2.00
F. T. Ley, Springfield, Mass.	.155	.13	2.00
P. Sweeney, Danbury, Conn.	.20	.19	2.85
J. H. McKnight, Hyde Park, Mass.	.35	.36	4.00
John T. Langford, Newton, Mass.	.14	.14	4.00
G. M. Atkins & Co., Palmer, Mass.	.13	.12	4.00
H. W. Warner, Northampton, Mass.	.17	.14	2.00
R. D. Maynard, Springfield, Mass.	.14	.14	4.00
John Marsden, Utica, N. Y.	.12	.12	1.00
Daniel O'Connell & Son, Holyoke	.25	.25	4.00

* Awarded contract.

BRIDGE WORK.—Minneapolis, Minn.—E. T. Abbott, County Surv., informs us that the following bids were received June 7, for bridge work

Approach to Hanover Bridge.

Bidder.	Excav., 500 cu.yds.	Mas'ry, 188 cu.yds.	In place— Steel work.	Plank, 1 M. ft.	Total.
Burns & Fagan	$0.15	$4.00	$60.00	$35.00	$919
E. D. Van Lorman	.27	3.30	63.00	20.00	838
J. Lally & Co.*	.30	3.50	63.72	30.00	750
Canney Bros.	.50	3.00	50.00	28.00	942
M. Davitt (informal.)					

* Awarded contract with masonry at $2.87 a cu. yd.

Elm Creek Bridge.

Bidder.	Steel wrk in place.	Excav., 9,000 cu.yds.	Masry, 108 cu.yds.	Plank, 2½ M. ft.	Total.
W. A. Les	$681	$0.08	$4.50	$27.00	$1,196
Wis. B. & I. Co.	355	....	....	....	.....
Burns & Fagan	600	.15	4.00	30.00	1,307
J. Lally & Co.	453	.15	3.25	25.00	1,196
*Canney Bros.	450	.12	2.75	25.00	1,050
Gillette-H. Co.	347	.105	4.50	21.60	1,091
E. O. McLoughlin	450	.10	4.50	20.00	1,186
P'ngst'n Br. Co.	379	.30	3.30	36.00	1,663
Jas. K. Scott and Frankman Bros. (informal).					

* Awarded contract.

ASPHALT PAVING.—Allegheny, Pa.—The following contract for sheet asphalt paving in Franklin St. has been awarded by the council to the Vulcanite Paving Co.: 3,800 cu. yds. excavation, at 30 cts. a yd.; 11,500 sq. yds. sheet asphalt paving, at $1.60 a yd.; 1,000 lin. ft. curb (new), at 50 cts. a ft.; 1,000 lin. ft. curb, reset and redressed, at 20 cts. a ft.; total $20,240.

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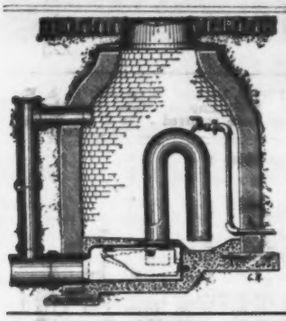

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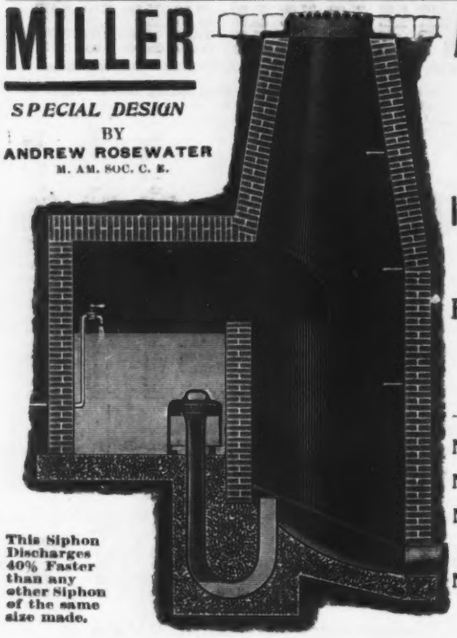

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No Moving Parts.
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No Small Tubes to Clog or Choke.
Nothing Whatever to Get Out of Order.

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PACIFIC FLUSH TANK CO.,

Write for Catalogue and Prices. **84 La Salle St., CHICAGO.**

U. S. ENGINEER OFFICE, Boston, Mass., May 27, 1897.—Sealed proposals for REMOVAL OF LEDGES IN Gloucester Harbor, Mass., will be received here until noon, June 28, 1897, and then publicly opened. Information furnished on application. S. M. MANSFIELD, Lt. Col. Engrs. 22-3t

U. S. ENGINEER OFFICE, Boston, Mass., May 27, 1897.—Sealed proposals for DREDGING in Essex River, Mass., will be received here until noon, June 28, 1897, and then publicly opened. Information furnished on application. S. M. MANSFIELD, Lt. Col. Engrs. 22-3t

EXTENSIBLE SEWER BRACE,

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WATER-WORKS AND SEWERAGE.

CHESTER, S. C.

Sealed proposals will be received until 4 p. m., Friday, July 2d, by the Commissioners of Public Works in the City of Chester, S. C., for furnishing material and constructing complete systems of water-works and sewerage for said city.

The approximate quantities of works are as follows:

WATER-WORKS:

470 tons (2,000 lbs.) C.-I. pipe, 8-in., 6-in. and 4-in. diam.
8 tons Specials.
50 Double-Nozzle Hydrants.
33 Valves and Boxes.
34,550 lin. ft. Laying Mains.
18 × 120-ft. Steel Stand-pipe.
Duplex Pump and Compressor.
2 Return Tubular Boilers.

SEWERAGE:

Furnishing and laying 27,600 feet 8-in. Vitrified Pipe.
Furnishing and laying 1,720 feet 10-in. Vitrified Pipe.
Furnishing and laying 1,960 feet 12-in. Vitrified Pipe.
Furnishing and laying 970 feet 15-in. Vitrified Pipe.
Furnishing and laying 3,100 feet 18-in. Vitrified Pipe.
51 Manholes.
20 Flush Tanks.

Plans can be seen and specifications obtained after June 25th at the office of the Secretary of Commissioners, Chester, S. C., or at the office of the engineers, 150 Nassau St., New York.

Each bid must be accompanied by a certified check of $1,000 payable to the Secretary of the Board. The right is reserved to reject any or all bids.

J. L. GLENN,
T. H. WHITE,
S. M. JONES,
Commissioners of Public Works.
JAS. McLARNON, Secretary.
POWNALL & MINSHALL, Engineers. 24-2t

BRICK PAVMENT.

HORNELLSVILLE, N. Y, June 8, 1897.

Sealed proposals will be received by the undersigned until five o'clock p. m., of Monday, June 21st, 1897, for about 8,000 square yards of brick street pavement. A certified check for $500 must accompany each bid, which must be made on the regular form.

For specifications or any further information address

F. W. DALRYMPLE,
City Engineer.
22-3t

SEWER TUNNEL.

OFFICE OF THE
PUBLIC IMPROVEMENT COMMISSION
OF THE CITY OF COHOES, N. Y.

TUNNEL.—Sealed proposals will be received at this office until 3 o'clock p. m., of Tuesday, July 6th, 1897, for the construction of a tunnel 9,000 ft. long, including manholes, two inverted siphons and outfall, for the trunk sewer of Cohoes, N. Y.

The tunnel is in rock and earth, 6 ft. high and from 4 to 5 ft. wide, invert lined with concrete.

Proposals must be on forms furnished by the Commission and must be accompanied by a certified check of one thousand (1,000) dollars, drawn on a National Bank and made payable to the "City of Cohoes," the same to be and remain the property of the "City of Cohoes" if the party or parties bidding fail to enter into contract, providing the same be awarded to him or them.

Plans may be seen and specifications and blank form of proposal obtained at the office of "The Public Improvement Commission," Cohoes, N. Y.

The Commission reserves the right to reject any or all bids.

WILLIAM J. ELLIOT, Clerk.
EDWARD HAYES, Engineer.
RUDOLPH HERING, Consulting Engineer.
24-2t

TREASURY DEPARTMENT, U. S. Life-Saving Service, Washington, D. C., June 9, 1897.—Sealed proposals will be received at this office until 2 o'clock p. m., of Monday, June 21, 1897, for the construction of a LIFE-SAVING STATION at Nausett Beach, near Chatham, Mass. Forms of proposal, together with plans and specifications, can be obtained upon application to the Superintendents of Construction of Life-Saving Stations, Atlantic and Lake Coasts, 24 State Street, New York city; to the Superintendent, 23 Life-Saving District, East Orleans, Mass.; to the Assistant Inspector, 1st and 2d Life-Saving Districts, Room 148 Post-Office Building, Boston, Mass.; or to this office. S. I. KIMBALL, General Superintendent. 24-1t

U. S. ENGINEER OFFICE, 601 18th St., N. W., Washington, D. C., June 15, 1897.—Sealed proposals for furnishing RIPRAP STONE, BROKEN STONE, SAND, PEBBLES AND AMERICAN NATURAL CEMENT will be received here until 12 m., July 6, 1897, and then publicly opened. Information furnished on application. CHAS. J. ALLEN, Lt. Col., Engrs. 24-3t

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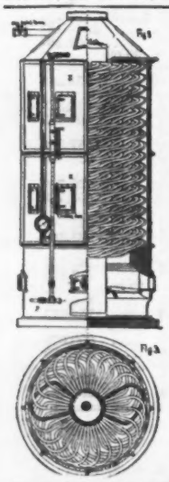

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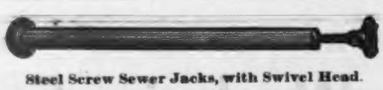

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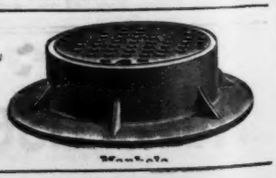

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